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ORIGINAL ARTICLES.

THE DANGERS OF INFECTION BY PERSONAL CONTACT WITH DISEASES NOT REGARDED AS ACTIVELY CONTAGIOUS OR INFECTIOUS.*

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As no pretense will be made for any claim to priority for the subject of the remarks I have to make, I shall offer no apology for bringing to your notice a few of the facts on "The dangers of infection by personal contact with diseases not regarded as actively contagious or infectious,"—nevertheless I cannot hope to escape criticism at first sight by those who may believe that the discussion of this subject is untimely, in that special reference will be made to the double occupancy of beds, which has been the rule observed by our ancestors from time immemorial, and it may be thought good enough for us now.

I am not unprepared to hear any reasonable amount of criticism, and I shall take refuge against it in the light of an advanced state of observation, which has given us more accurate knowledge and replaced sophisms by logical conclusions, which physiological facts have shown to be more in accord with the laws of self-preservation.

For many years there have been certain diseases recognized as not contagious or infectious, and yet persons who were known to be in good health before coming in contact with those afflicted by them, often became their victims. The *materies morbi* which were at work, causing many diseases, were accounted for hypothetically only, until Koch announced his discovery of the germ of consumption. Then it was that important light was thrown upon the spread of diseases which hitherto had been shrouded in mystery. Since Koch's important discovery of the tubercle bacillus, the science of mycology has received new impetus, and it is making rapid progress in the search for truths.

The danger of certain insidious diseases being transmitted by contagion or infection, before Koch's discovery was too little regarded by physicians. Now, the importance of prevention is being more fully appreciated, and it is receiving careful consideration at the hands of physicians and others whose duty it is to protect the health of those whose lives are entrusted to them.

Another important and more recent discovery has been found in the fact that there are certain disease germs which do not live in the normal air, and others that do live and thrive in it. Whether or not this peculiarity applies to any of the germs found in the diseases of the air passages, I have seen no mention made of it.

Now, let us consider the character of the excretions and exhalations which are present in every person in a state of health, and we find certain poisonous ingredients which render their immediate atmosphere impure. When these poisonous products are inhaled, they tend to weaken vitality and render the recipient more susceptible to the action of disease germs, while had these products been first subjected to the free air, their properties would have been changed and made inert.

In those suffering from disease, more poisonous products are present in their immediate surroundings; and in addition there are disease germs awaiting a suitable soil in which to grow and multiply.

There are many diseases of the air passages, indeed nearly all of those affecting the mucous membranes, that are now recognized as contagious or infectious, as well as the more insidious disorders which affect the lungs. Contact with these diseases render the subjects more liable to be infected by them. Children sleeping together in the same bed often convey the seeds of disease to each other through the respired air, which a distance of a few feet from each other might have prevented.

Imagine, by way of illustration, two persons occupying the same bed, one of whom is sick and the other is well; the well one is inhaling the breath as it leaves the nostrils of the sick, warm and laden with its millions of disease germs, and it will be readily understood how even insidious diseases not actively contagious or infectious may be transmitted to others. There are few physicians who have not been brought face to face with the sad scene of a house deprived of its most useful member for the want of precaution against those insidious germs which were conveyed from the lips or in the respired air from the lungs of a bed fellow who was the victim of consumption. It is, therefore, no longer any surprise to find that the husband or wife has become the subject of consumption after sleeping in the bed together, one of them being a victim of that insidious malady which knows no foe.

The remedy for this evil suggests itself, and it has already received some recognition abroad. Do away with the use of double beds, and replace them by single ones, furnished with separate clothing. The same room may be occupied by the

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husband and wife, and the beds may be placed near enough to each other for companionship. This arrangement of the beds will cause the poisonous products of the exhalations of persons to become diluted and changed by the air, and rendered less injurious to health when again inhaled. The advantages to be derived from the use of single beds will become apparent for reasons other than the prevention of disease. The arrangement will, in most cases, tend to preserve that sense of delicacy which closer contact sometimes dulls.

Again, when persons are fatigued by overwork or mental worry, which give rise to insomnia and cause them to become restless and roll about, or, when necessity compels them to leave the bed, the companion will not be awakened or otherwise disturbed. There are many other disagreeable features which annoy sensitive and wakeful persons who occupy together double beds, such as heavy breathing, snoring and other strange respiratory sounds, which distance would render much more endurable. Late or irregular hours on the part of a companion for retiring often awakens the sleeper, and his sleep is over for that night.

Many other illustrations might be given to show the injurious effect of persons sleeping together in double beds.

We live in an age of reason and observation, and as guardians of the public health, true to our trusts, it is our duty to consider matters of such vital importance as I have referred to in this short essay.

DISCUSSION.

Dr. A. M. Cartledge: I wish to commend the idea advanced by the essayist in regard to single beds. Of course this was suggested long before Koch discovered the tubercle bacillus, and I think physicians, at least the majority of them, recognized the infectious principle of consumption in such cases as the Doctor refers to. Cases, for instance, where a husband or wife died of consumption, and in a year or so the other would follow without the last having had a predisposition to the disease by inheritance or otherwise. Such cases have been so numerous that it is certainly not a coincidence. In the present light of bacterialogical knowledge as to the infectious character of tuberculosis, it seems to me that this is a very important subject. Physicians should be particular to warn their patients about the dangers of sleeping together, especially if one of them is already affected with the disease; just as careful as we should be in looking after the water supply, if not more so. It seems to me not only possible but extremely probable that a person sleeping for a year or two with another who is the subject of chronic tubercular disease of the lungs, would almost certainly contract such disease, unless the resisting powers of the individual were unusual. Of course it might be three or four years developing to such extent as to become progressive or aggressive, and to cause death, but it seems more than likely that this will be the inevitable result. We know that a person may be affected with tuberculosis, for instance, for several years, without the disease manifesting itself in an active way. Certainly a healthy person should never sleep with a consumptive, and I believe we should go further than this and advise that no two persons should sleep together. We know that children are often crowded in a bed, three or four together, regardless of their condition of health, or consumptive tendencies, which might be productive of serious results. I believe that we have all been very direlict in this matter in the past.

Dr. Wm. Bailey: While I commend the idea of separate beds, for special reasons, I would go a little further than this and would commend different apartments as well. I think the essayist and the speaker following are both unfortunate in taking the disease for illustration—phthisis pulmonalis. If they will consider a little more closely the history of the tubercle bacillus they will agree, when their attention is called to it, that the danger is not in the respired air; it is not in the fresh sputa, but that the germ goes into the atmosphere after being expectorated and after the sputa has dried; then infection occurs from the bacilli contained in the atmosphere and breathed in that way. So really the danger from the consumptive is not in breathing his breath, but it is being in an apartment where he is in the habit of expectorating, the sputa drying, then entering the atmosphere, so that the apartment is the infected place and not the atmosphere immediately coming from the lungs. It is not the fresh sputa that is dangerous; it is the habit consumptives have of expectorating over everything in the room, and that not being destroyed. We ought to go further than this with tuberculous patients and destroy all sputa coming from them, so as to destroy the possibility of contagion. A consumptive's apartment and the atmosphere in it becomes contaminated, and is dangerous whether we sleep in it or not; living in it in the day time, not being properly ventilated, perhaps, after the night, and the sputa being in different parts of the room, drying and entering the atmosphere with the dust it may be, after sweeping, etc. In this way the atmosphere is made impure, so far as this disease is concerned. I do not believe there is any history of the tubercle bacillus being found in the atmosphere as it is expired from the lungs. I do not think that can be demonstrated. The air coming from a lung, however tuberculous, does not contain the tubercle bacillus. It is in the sputa, but this when it is fresh is not the dangerous state, but it is as I have already intimated, after it has dried and becomes pulverized, and in that way goes into the atmosphere. Hence I say I would go further and advise separate apartments under such circumstances, as well as separate beds. I think it is a bad habit to sleep with sick people. I have questioned whether it is right for very young people to sleep with very old persons; it is a question of very great importance. For in-

stance, the habit of putting a child to sleep with its grandmother—there is something to my mind in that. In the olden times it was recognized that strength was imparted to the old by contact with the young, and if there has been energy given to one it has been taken from the other. I doubt myself if in a strictly sanitary point of view, we ought to sleep in the same bed with other people, or in the same apartment with them. Yet, if every man who takes the tubercle bacillus into his lungs contracted consumption, it is my opinion there would be none of us left.

Dr. F. C. Wilson: I agree fully with Dr. Bailey that the danger lies not in the respired air, but in the contaminated atmosphere of a consumptive's apartments. While we recognize the minimum amount of danger from that source (respired air), in my own practice I have always cautioned patients to turn their backs upon each other when sleeping together. As far as the danger of breathing contaminated atmosphere is concerned, few of us realize how great that is and to what dangers we are all exposed. Of course, in a healthy respiratory passage the danger is reduced to a minimum, not only by the resistive powers of the system, but because of the inability of the germ to penetrate the tissues. The germ is simply landed upon some mucous surface, and is dislodged and thrown off with the next expectoration. Now there is a class of cases the numbers of which met with in my work at the Chest Clinic, where I have been engaged for a number of years, have greatly surprised me. I have for the last ten or fifteen years noticed a large number of cases where the bronchial glands were enlarged. The mass of glands situated just in the forks of the bronchial tubes, which in some way have become infiltrated, indurated and enlarged, possibly degenerated. I say I have been surprised at the number of cases of that class that I have met with. It is a condition that vastly increases the danger we are all subjected to from the inspiration of a disease laden atmosphere. This gateway of the lung is the point where germs would first lodge, and a current of air laden with them would impinge upon the bronchial tubes, just about the bification of the trachea. Of course, lodged at this point, if these glands were in a degenerated condition, they would form the very best possible soil for the propagation and multiplication of these germs. I have probably seen one hundred cases of this character at the Clinic, under my charge, in the last ten years. Within the last few years I have seen in the *New York Medical Journal*, an article detailing a number of autopsies made in this class of cases in connection with one of the foundling hospitals in New York; these cases were among children particularly, but I have seen them not only in children but in adult life. Patients usually complain of persistent, spasmodic, bronchial cough, located low down at the root of the lung, perhaps with little expectoration, occasionally a mass of tough mucus will be brought up. This cough will resist the effect of various mixtures that may be taken, and perhaps the patient will finally consult a physician. Upon examination he will find no evidence of tuberculous trouble, no deposit in the apex of the lung, perhaps he fails to examine the affected portion, and is thus little enlightened by his examination as to the cause of the cough. Whereas, a careful physical examination of the case would disclose an increased area of dullness about the root of the lung; and I have noticed in eight out of ten cases the trouble occurs in the right side. Why this should be I hardly know, but I have observed the clinical fact that a large majority of these cases occur at the root of the right lung rather than the left. In addition to this increased area of dullness there will be bronchial breathing, large sized sonorous rales, and occasionally mucous rales, though frequently these are absent. Then if the case has been exposed to a diseased atmosphere and tuberculosis develops, we often have evidence of that in further degeneration and possibly abscess of these glands, breaking into the bronchial tubes or into the lung proper. I recollect seeing a gentleman several years ago who gave a history of disease of the lungs which came on in just this way, invading the system through this gateway, then extending out through the middle lobe of the right lung with a column of solidified degenerated lung tissue until it reached the surface of the lung, and it could be distinctly mapped out. After a few months it involved the larger extent of the lung, and finally the patient succumbed to the disease.

I say few of us realize the danger that patients are subjected to in the large amount of poison in the atmosphere that we meet with every day. We see patients going about the streets expectorating upon the pavements; of course that mass of expectoration dries, and we have it wafted up in the form of dust particles floating in the air or carried by the atmosphere. When we think of an estimate I have seen somewhere, that a well-developed tuberculous patient will expectorate more than a million of these tuberculous germs in every twenty-four hours, the computation astounds us when we attempt to compute even in the most approximate way the number of germs that we meet with in the atmosphere. Of course in the general atmosphere this is reduced to a minimum by dilution with the entire atmosphere. When we come to think of the wards of hospitals, where we find a dozen or more patients crowded in one room, which is, perhaps, badly ventilated, and in which are kept scores of other patients suffering from other diseases, the aspect is appalling. I am satisfied that in our own hospital I have seen case after case develop in the general medical ward in which were treated consumptive patients. I have seen patients enter that ward for other diseases, whose lungs were entirely free from any infection, yet they have become infected, I am satisfied, simply from breathing the atmosphere of the ward.

Dr. C. Skinner: What is the most com-

mon cause of enlargement of the bronchial glands?

Dr. F. C. Wilson: Almost any prolonged or chronic disease of the mucous membrane will lead to it. Chronic bronchitis, or often chronic inflammation of mucous membrane higher up will by implication of the lymphatics lead finally to enlargement of these glands. If the system has inherited some strumous diathesis, then they would be very much more liable to take on this form of infiltration or degeneration than if the constitution were entirely free from any tendency of that sort. Persons having this constitutional tendency, exposed to any chronic inflammatory condition of the mucous membranes would be almost certain to develop enlargement of these glands.

Dr. C. Skinner: The subject under discussion is certainly a wonderful one for future thought and practice in every line. I suppose we all advise the course indicated by the essayist, but when we come down to the practice of the matter, I do not know that any of us have succeeded in getting our patients isolated. They make all sorts of excuses. Take, for example, in diphtheria, now. How difficult it is oftentimes to get mothers and fathers to remove other children from the house when there is one case of the disease in the family. They will not do these things, especially when it comes to separating husband and wife. One point in the discussion which struck me particularly is the danger of inspiring the expired air of other patients. Then again the remark made by Dr. Wilson as to the millions of germs deposited over the streets, where the atmosphere, of course, would be loaded with these germs generally. I think we all see cases more frequently develop in tuberculous families where the patients are members of the family; the healthy ones have been thrown intimately with the sick ones. This is not so much from street contamination as from house contamination. I do not think it depends so much upon the air they breathe from one to the other, but it is contagion gotten from the infected condition of the body of the patient who has tuberculosis. They cannot help but get the sputa upon the bed clothing, where it dries very rapidly, and by being constantly thrown with a case of that sort the danger of infection is much greater, bringing back the importance of separating sick people from each other. It is indeed appalling to think of the dangers we are exposed to on the street, in public conveyances, railroad trains, etc., but, after all, it seems to me that we can trace the greater number of these cases back to families and sleeping chambers. Tuberculosis is a disease we have lost control of for the simple reason that we cannot get people to realize the dangers. I always insist upon the use of sanitary cuspidors; if none other are available, a wooden or paper box filled with sawdust, which can be burned every day, never allowing the sputa to become dry; further, I never allow napkins, handkerchiefs, etc., used by a tuberculous patient to be used by any other member of the family. I think this whole subject is wonderfully full of thought and one that we cannot talk or write too much about, cannot act too much upon—separating sick people as well as those who are not sick from each other.

I would like to ask Dr. Wilson how he reconciles the fact that the majority of these tuberculous cases develop in the periphery of the lung, not in the apex; how the enlarged glands he speaks of have anything to do with the infection. My experience is that in the majority of cases the beginning of tuberculous consolidation is in the peripheral surface of the lung and not in the apex.

Dr. A. M. Vance: I believe that the idea of people sleeping together might be done away with to a certain extent by urging the separation of children and educating people up to this idea. This is followed, more or less, in some countries.

Dr. J. W. Irwin: I selected consumption only as an illustration. I alluded to the fact that there were few diseases of the mucous membrane of the throat that were not recognized now as contagious or infectious. Close contact is conducive to the development of these disorders. I used consumption as an illustration because we have frequently met with husband or wife the subject of consumption; if one or the other die or become affected with the disease it frequently develops sooner or later in the other.

Now, the question that Dr. Bailey raises in this connection I recognize is one that we are a little in the dark about—that is, that the germs of consumption have not been found in the respired air of the consumptive, yet this does not prove that the germs do not exist in the respired air. One thing is certain, the husband who sleeps with a consumptive wife is very much more liable to take the disease than another member of the family. If the dust of the room contained the seeds of the disease from the dried sputa, we would naturally expect that the chambermaid, who cleaned up the room and inhaled this dust after sweeping, would be the one who would suffer most, as no such occurrence takes place in presence of the husband.

Now, let us suppose that there is no such thing as inhaling the tubercle bacillus fresh from the lung of a consumptive; there is something else we must consider. We have contact with the lips and the toxalbumens and their poisonous effects to contend with, which tend to weaken vitality and prepare a suitable soil for the reception of disease germs. Certain it is that this must be the case, because the husband or wife are the ones to take the disease rather than other members of the family. On those grounds I made the statements, realizing what Dr. Bailey has said to be true, that the germs of the disease have not been found in the respired air.

The question of isolation is one of the greatest importance. There are few houses large enough

to accommodate every member of the family by putting one in a room, but the time may come when the good work begun by sowing seeds in that direction will enable people to have houses of sufficient size and so arranged as to accommodate all members of the family in that way. The further we keep away from disease elements the less liable we are to be affected by them is certain. Certainly with single beds and separate clothing we begin a work of reform that will be shown to have a good effect. Better results might still be shown, perhaps, by putting the beds further apart, and separate rooms would be more advisable, and the statements I made were based principally upon these grounds.

I do not know that there is anything more I can say, confining myself strictly to the subject, but it is clear that we do inhale a great many germs from the atmosphere; we take them into the throat, they lodge in the mucus, they are expired and we escape them. But if they find a suitable soil where they can grow and multiply and get beneath the mucus, we are more liable to take on diseases, and in this way it is very reasonable to believe that diseases not actively contagious or infectious may have their origin in our throats for a long time and yet not develop into any very serious trouble in the lungs.

LIFE IN THE CELL.

By James A. Carmichael, M. D., New York.

THE CENOZOIC AGE—AGE OF MAMMALIAN LIFE —TERTIARY PERIOD.

From the earliest known period of the existence of the earth, viz., that which has been geologically denominated the Primary, as contradistinguished from the succeeding Secondary, Tertiary and Quaternary periods, and also designated as the Palæozoic, the age of ancient life, as its name imports—*παλαιον-ξοον*—old or ancient, and life or living being, with its still further subdivisions of the Azoic, *a* neg. and *ξοον* in which there was no life; then the Zoic or the first appearance of life in the form of the invertebrates, followed by the vertebrates—age of fishes. Next in order the Carboniferous—age of coal plants and first reptiles, and onward through the Secondary or Mesozoic Age—the age of the true reptiles—with its subdivisions, and the appearance of various forms of animal life, our investigations now bring us to the third generic geologic division—the Tertiary or Cenozoic Age. This age, like those antecedent, has also been geologically subdivided into certain periods, successively denominated as the Eocene, Miocene and Pliocene —the three constituting the "Age of the Great Mammals." In contemplating the periods of time through which the earth passed to arrive at the beginning of its Cenozoic Age, the most careless observer must be struck with two grand cardinal facts; first, the vast and almost inconceivable æons of years expended in the terrestrial transition, with the changes steadily occurring upon the earth's surface; and, second, the uninterrupted appearance of living forms, each in their turn denoting progressive improvement, a more perfect development, and a more consistent fitness for the then telluric conditions, and especially the continuance of the unbroken links in the chain of physical affinity, by which every succeeding representative of life was indissolubly bound to its respective predecessor, and easily traceable by the geologic savant or the student of the anatomical structure of successive palæontological existences. To these two generic facts is superadded another of supreme interest, and whose value in the creation and subsequent development of life cannot be adequately measured. The same cell unit that created the degraded monad and set in motion its feeble and transitory life, has continued its marvellous work of begetting life in all the multitudinous forms that have filled the earth from the beginning with a potentiality of reproduction, always increasing as the creature to be created was to be endowed with powers of motion, sensation, instinct and perception, such as had belonged to no anterior life. As the Devonian era of the primary Palæozoic Age witnessed the origin of the vertebral pillar that was distinctive of a new order of life—the vertebrate—as the carboniferous covered the earth with plant life that hid its sterile nakedness, and as the Mesozoic abounded with hideous and repulsive reptilian life, so, in each and all, was cell activity ever manifesting its prolific forces in the creation of forms of beauty, had there been eyes to see, or of ugliness, had there been sensibilities to shock. All the same, the little insignificant cell was doing its work of creating, forming, developing, fashioning, modelling and adapting the creature to its environing conditions, and all subject to inflexible creative law. As the Palæozoic Age was distinguished by the evolution, through cell instrumentality, of the invertebrates, the vertebrates, and of plant life, and as the Mesozoic was equally characterized by reptilian life, so do we witness the dawn of the birth of another form of animal life in the age now under consideration—the Cenozoic. This new form maintained the progressive principle of a still higher development, an advance towards a still greater perfection, and a more complete adaptation to increasing and improving telluric conditions. Like the antecedent life manifestations, it was necessary that it should begin incompletely and pass through various intermediate conditions, each succeeding condition bearing the structural characteristics of its predecessor, with the addition of certain newly-bestowed powers to show that the process of the steady advancement towards a more complete development was always inexorably urging it onward and upward in the creation and evolution of new and improved forms of life. The time had come for the establishment of other and unaccustomed progenitive life methods and processes. Hitherto, in the Mesozoic

Age just ended, life had sprung from the cold-blooded, oviparous saurian through, as it were, the effete exuviæ of its own body. But now, life must come from life directly, with no intermediate condition. The tender instincts of the parent towards offspring must be born into the world. Nature now uplifts her head and begins to thrill with the premonition and prevision of coming man. The same blood that warms the parental heart must now run in the same warm and vital current to the young life hidden in the parental body. The same viviparous law that shall hereafter govern all future animal life, of whatever kind, has been decreed, and shall rule to the end. In this, the Tertiary period of the existence of the world, geologic science marks the beginning of the appearance upon the earth of what it designates as mammalian life. As we have said, it was necessary that this new form of life should begin incompletely and pass through intermediate conditions before assuming the more complete mammalian form.

Upon this subject we cannot do better than repeat what is said by our author of the change from reptilian to mammalian life. "The transition from a cold-blooded, oviparous saurian to a warm-blooded, viviparous mammal was not abrupt or sudden. It was a slow and very gradual process of evolution, and required a long period of time for its accomplishment; neither was the transition direct from the saurian to the mammal. An intermediate form was evolved, namely, a marsupial, which was a semi-mammalian, and which brought forth its young alive, but imperfectly developed, completing the process of development external to the parent's body, in a pouch of abdominal integument—marsupium—after its expulsion from the maternal body." Of the transition periods of the Tertiary Age that ensued and that brought about the physical changes which characterized the evolution of mammalian life from the antecedent reptilian life of the Mesozoic Age, we do not propose to state them in detail, but refer the reader to the very interesting anatomical and physiological phenomena that attended these processes of progressive evolution as given by our author. It will be seen that the changes constantly going on, by which a viviparous animal was ultimately evolved from the oviparous, were not abrupt or disassociated, but that the one condition was the natural outgrowth or complement, as it were, of its predecessor. The ovipara, instead of projecting the ovum from the body and subjecting it to the procreative influences exercised upon it extra corporeally, as in the case of fishes, in which the ova are visited and fecundated by the male, and among certain of the saurians, in which they are vivified externally to the body also, has now become viviparous by having assumed a greater degree of vital development, under the supervision and forceful compulsion of a more energetic cell force, and even before the existence of the true uterus, "the female could retain the fecundated egg within her body until the young was hatched." It was then but a step to the true viviparous function, and the establishment of the great law of reproduction that began from that moment of time and which obtains to the present hour. Our author well expresses this: "The act of bringing forth the young alive from the generative organs of the female, and the secretion of milk from the mammary gland to nourish the young in its helpless state of infancy, was the greatest upward step in the evolution of the important order of the mammalia that appeared in the Tertiary Age." What was the condition of the earth at the period of the opening of the Cenozoic, or, more properly, Cainozoic Age, from *καινος* recent or new, and *ξοε*, life, because of the upper strata of this period presenting forms of life identical with or similar to those still living? The Triassic, Jurassic and Cretaceous periods of the antecedent Mesozoic Age had witnessed the origin, the intermediate transformations the maturity of development, and the decline of true reptilian life. The earth, which before the advent of the Carboniferous period of the Palæozoic Age, had been infecund and barren, has now become, through nature's generous husbandry, fructuous with the overflowing verdure of plant and arboreal life. The gross and repulsive reptilian forms that once possessed the land and swam the seas have yielded to the inflexible law that then and still decrees the span and limit of life that is mortal and must die! Their bones, held in solid adamant, or crumbling from the erosive tooth of time, still continue to give up to curious and incisive science, from which nothing escapes "that lives upon the earth and in the waters under the earth," the secrets of those far-off, Palæozoic days when they, too, "lived and had their being." And now, from the beginning of the Cainozoic age, the same vitagenic cell is doing its work among gentler forms; creatures are being born into the world endowed with new instincts, appetites, desires, passions, and the initial links are forming in the chain that shall forever bind, in its continuous and unbroken length, life with life, on and on, higher and higher, until man, the upward-looking *ανθροπος* stands revealed and confessed and erect in the majesty of a perfected organization. From this point, viz., the appearance upon the earth of mammalian life, the true links in the chain of association of animal life begin, and the student of the history of geo-palæontologic, archæologic, osteologic and anatomic debris, as it refers to the structure of the creatures that lived in remote ages of the world's existence, can easily follow, step by step, the origin, progress and maturity of generation after generation as they succeeded each other, and note the links of association between them, and how each succeeding generation gave physical and other indications of the onward march of the development of greater and still greater powers and properties. It is not our purpose to indulge

a strong inclination to enter upon this most attractive work, but only enough to keep up the association of animal life until we reach our objective point, man. He and the study of the cells that make him and sustain him are the objects of our pursuit, and a most momentous study it is, and one whose magnitude imposes the need of our utmost courage "to prick the sides of our intent" in order that we may be inspired by the faintest hope of solving even a few of its mysterious operations.

VACCINIA.

BY ROBERT N. TOOKER, M. D.

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VACCINIA is a mild, eruptive fever produced by vaccination, for purposes of protecting the subject from the graver disease, smallpox. It is communicable only by contact, and is not contagious through the air, like the other eruptive fevers.

It is inoculable by the lymph contained in the vesicle, and also by the moistened scab which results from the dessication of the pustula.

Vaccination has now everywhere taken the place of inoculation, which method was the first step which scientific medicine took to stamp out that most dreaded of all diseases, smallpox. For fifty years—the latter half of the eighteenth century—inoculation was practiced both in Europe and this country, but so many deaths and so much indirect suffering occurred as the result of this method that it began to be looked upon with distrust. The efficacy of the operation in mitigating the severity and danger from smallpox was certainly very great, for the proportion of deaths following it was, on an average, only about three in a thousand—a very gratifying contrast to the mortality of the disease communicated in the usual way. "But there was one fatal drawback; however light the engrafted disease might be, it was still smallpox; and the more it was conveyed in this way, the more centers of infection multiplied from which those not protected were liable to contract the disease in its worst form.

"To individuals inoculation was a great blessing; to society at large it was a great curse. In the early part of the eighteenth century, before inoculation, about one-fourteenth of the deaths in Great Britain were from small pox; in the latter part, after inoculation had become quite general, about one-tenth of the deaths were from that disorder."* It was at this time (1796) when inoculation as a preventative of smallpox had received general recognition, but not general adoption, for reasons already stated, that Jenner demonstrated the great and immortal fact, that by passing the smallpox virus through one of the lower animals, especially the cow, it could be so modified as to lose its contagious properties, and yet when inoculated, thus modified, into the human system, it affords all the protection which resulted from the use of the genuine virus.

Vaccination is then the conveyance of smallpox into the system of a susceptible human being, but of a smallpox wonderfully modified and shorn of its terrors, by previously passing it through an animal. In the process of transmission through a lower animal organism it has in some way parted with its contagious property, so that vaccinated smallpox, thus modified, is not constantly spreading the disease as was the case with inoculated smallpox.

Jenner demonstrated that the horse as well as the cow could be made the subject of variolous infection, a fact that has been repeatedly verified since his day. At present, however, the cow is practically the only sourse of original supply of vaccine virus; indeed the term vaccination is derived from "vacca," "a cow."

No other discovery in the whole history of medicine compares with that of Jenner in relieving human suffering and saving human life; and if vaccination were only universally employed there is every reason to believe that smallpox would be wiped from the face of the earth. In Chicago there is a constant inspection of all the pupils attending the public schools, and no child is permitted to attend school without a certificate showing recent vaccination. During the year ending December 31, 1892, smallpox made its appearance five times, but in every instance the source of contagion was traced to foreign residents, and in a population of 1,200,000 people there were during this year but two deaths from smallpox. The opponents of vaccination need no other answer than to contrast this almost complete exemption with the annual mortality from the disease in all countries one hundred years ago.

THE VIRUS.

Until comparatively a recent period the source of supply of fresh animal virus was so uncertain and precarious that the custom prevailed of using lymph from the human subject, and thus transmitting the vaccine disease from one person to another.

But the danger of inoculating healthy persons with constitutional taints, such as struma and syphilis, came to be regarded as so great that of late years this source of supply has been nearly abandoned. Besides it is believed that the virus thus procured, after many transmissions becomes so attenuated as to be of uncertain efficacy. For these reasons it is now the general custom to use only bovine virus procured directly from the cow. In order to keep up a uniform and reliable supply of this virus, there have been established numerous "vaccine farms" in different parts of the country, where young heifers are constantly subjected to the process of propagation. From these "farms" or vaccine establishments, the lymph is

* Dr. W. T. Plant in "Cyclopædia of Diseases of Children." (Keating.)

distributed by mail or express, as needed, to all parts of the world.

The virus is dispensed either in the form of scabs or on ivory points that have been dipped in the fresh lymph of a punctured vesicle. The latter is decidedly the more preferable, as the ivory point makes an admirable vaccinator.

It should be borne in mind that vaccine virus, whatever be the source, is very perishable, and soon loses its efficacy if exposed to light, air, warmth or moisture. Cold does not affect it, and with proper precautions it may be kept indefinitely.

VACCINATION.

Vaccination is the slight surgical operation necessary to insert the virus, and consists in getting an abraided or denuded surface of small area on which the moist virus is placed and allowed to dry.

The exact site where the vaccination is to be performed is optional, but generally the arm or leg is selected. If the former the outer aspect of the left arm is preferred, at or near the insertion of the deltoid muscle.

With females we prefer to use the leg—it matters not which—for the reason that in a certain proportion of vaccinations, no matter how fresh and pure the virus, nor what amount of care is exercised in the operation, an excessive amount of inflammation and suppuration will ensue, and in consequence, a scar will result, which on the arm will ever after be an unsightly blemish. Even with boys we prefer the leg, an account of the greater facility with which it can be inspected, and if necessary, treated.

The ordinary instrument used for vaccination—where a special instrument is used at all—is the common lancet. This should be perfectly clean, and care should be taken not to draw blood, if possible.

The epidermis may be scraped until the cutis is exposed and a little serum exudes. This scraping should be over a surface from a quarter to half an inch square. On this abraded surface the virus, moistened just enough to "revive" it, is placed and allowed to dry. It is never best to cover the wound with plaster or bandage immediately after the operation, for the reason that either is liable to absorb the lymph before the skin is able to do so.

A better method than that just described is to scarify the necessary surface with the ivory point, which is made sharp at the charged end expressly for this purpose. A dozen or twenty linear incisions should be made, all quite superficial, and from half a line to a line apart; then as many cross incisions should be made in like manner, after the manner of a checker-board. If some blood is drawn, as is most always the case, it should be wiped up with a clean cloth or blotter. The ivory point, slightly moistened in warm water, should then be rubbed over the surface, and the moisture allowed to dry as before.

PAINLESS VACCINATION.

Which ever of the foregoing methods is chosen there is some pain, or at least some discomfort connected with it. Some children are more susceptible to pain than others. Few parents like to see their infants hurt, and to the on-looker the operation of scraping or scarifying the delicate skin of a young infant seems a barbarous procedure.

All of this can be avoided if the physician will but take the trouble, and the vaccination can be successfully done while the child is peacefully slumbering. The author does not know to whom he is indebted for this painless method, but he has employed it for many years past, and in scores if not in hundreds of cases. It is believed to be a superior method, not alone because it saves suffering, but because it is more uniformly successful in results than any other.

The plan is to apply to the arm or leg of the child, a few hours before the operation, say, the night previous, a piece of rubber adhesive plaster an inch square, in the centre of which has been placed a mere dot of Spanish-fly blister. The fly ointment should be used instead of the powder, as it deteriorates very rapidly, and care should be taken that the ointment is fresh, otherwise it will fail. After the lapse of a few hours the piece of plaster is to be carefully removed and a small blister will be found on the site of the cantharides. This should be punctured and the serum let out; and on this denuded surface of the cutis vera the virus is placed just as in the other methods. Care must be taken not to make too large a blister. The amount of cantharides should be the smallest possible—the merest dot—less in size than the head of an ordinary lead pencil.

SYMPTOMS AND COURSE.

For a period varying from three days to a week there are no visible or perceptible phenomena. The virus is in process of incubation. On the third or fourth day a small, hard papula makes its appearance at the point of operation. In the course of twenty-four or forty-eight hours this papula becomes a vesicle, and in another day it has become umbilicated and divided into eight or ten cells or compartments, in this respect acting precisely like the genuine smallpox vesicle. By the eighth or ninth day after the operation the vesicle has matured and attained its complete development. It is raised prominently above the surface and is distended with transparent fluid. This fluid is the lymph used for subsequent vaccinations where human virus is employed.

When desired for this purpose the vesicle should be punctured—never later than the ninth day—and carefully preserved in a cool place unless used immediately. At this time, a belt of inflammatory redness forms about the base of the vesicle or pustule, as it has now become. This is the characteristic *areola*, which indicates successful vaccination.

For several days the areola widens until it at-

tains a diameter of two or three inches. There is now considerable induration; the flesh is hard, hot, itchy and painful. As these phenomena develop there are constitutional symptoms evolved, such as fever, headache, rigors and general aching. The member operated on is apt to be lame and painful. Not infrequently the axillary or inguinal glands become swollen and tender. This state of affairs is of short duration. After the tenth day all inflammatory symptoms decrease; the areola fades away; the fluid in the vesicle loses its translucence and speedily dries down into a hard dark crust, which falls off about the twenty-first day, leaving a circular, depressed scar, at first red but soon pale, which commonly lasts through life.

DEVIATIONS AND COMPLICATIONS.

While vaccination ordinarily runs a regular course, one phenomenon following another in systematic order, this is not always so, and deviations from this rule are sometimes met with, for which the physician is unjustly blamed. The cases where vaccination produces more than a temporary illness, as above described, are rare; and when eczema or erysipelas supervenes, or extensive suppuration occurs, it is generally attributable to a constitutional defect in the child, rather than to the impurity of the vaccine virus or an ill performed operation. It is quite possible for diseases and tendencies that have been hitherto latent to be stirred into activity by this operation, but surely in such cases the unexpected results should not be charged to the operation itself, which as a rule is so free from danger and so benign in its effects.

The question is often asked as to the degree and duration of the protection against smallpox which is afforded by vaccination. There have been exceptional cases recorded in which vaccinated persons have contracted variola notwithstanding they could show the characteristic scar. In such cases the immunity is only partial and a modified smallpox is possible. Dr. Buchanan, of London, has carefully compiled statistics of deaths from variola among the vaccinated and the unvaccinated, from which it appears that the death rate from smallpox among those who were vaccinated in infancy is forty per million, while the death rate from this cause among the unvaccinated is one in 5,950.

Among those vaccinated in infancy or early childhood there is undoubtedly a tendency to outgrow the protective virtues of the operation. There is a general impression that such vaccination should be repeated after puberty is passed. Dr. Martin is quoted as saying that he has succeeded in revaccinating with bovine virus in seventy-three per cent. of the cases in which he has tried it. In case of smallpox exposure re-vaccination should be performed, unless a prior vaccination has been successful within five or six years, whether in child or adult.

It occasionally happens that a child is vaccinated one or more times without typical results. In such cases the fault is presumably the fault of the virus or the operator, rather than the subject. It is believed that susceptibility to vaccinia is universal and without exception. Dr. Plant is authority for the statement that of upwards of nine thousand operations done at the Blackfriars Station of the National Vaccine Establishment since 1859, there was but one single case which in a second trial was unsuccessful. There may be cases in which for a time the system may have lost its susceptibility, as where pre-occupied by some other disease or perturbation, but this is undoubtedly only for a limited time and in a very limited number of individuals. It is hardly possible for it to extend over a life time in the face of so much opposite experience.

The age at which vaccination should be performed is worthy of a moment's consideration. Nearly all countries require that it be done before the end of the first year. In England, the Vaccination Act of 1867 requires the operation to be performed "within three months of birth, or as soon afterwards as the public arrangements of the district in which the family lives will afford opportunity of obtaining gratuitous vaccination." It should be done in most cases before dentition begins or between the first and fourth months. In case the child is out of health or has any skin eruption it should be got in good condition before the operation.

In case smallpox is prevailing in the vicinity there is no reason for postponement, either on account of age or bad physical condition. Wolff (*Brol. Klin. Woch.*, No. 17, 1889) reports the vaccination of eight new born infants, one or two days old, with humanized lymph, and has observed in them the normal development of the pustula with a complete absence of the vaccine fever. An equally good result was observed in thirty-four other new-born infants, in ten of which the mothers were vaccinated immediately before birth. Fifteen new born-infants were inoculated with animal lymph, and quite as many were successful as is the case in older children. The only point of remark in the two sets of inoculations was the much higher maximum of temperature reached in the cases in which animal virus was used. The author concludes that new-born infants are equally susceptible with older children to vaccination; that the operation is attended with no danger, and that in times of variola epidemics the new-born babes should be vaccinated without delay.

The season of the year seems to have no special bearing on the subject. In summer and winter the course of vaccinia is the same. An unprotected infant, no matter how young, who is about to travel in a public conveyance should always be vaccinated before starting.

AFTER-TREATMENT.

Although in any case the amount of suffering attendant on vaccinia is but trifling when com-

pared to that horrible disease which it seeks to prevent, still there are cases where the pruritis is very distressing, and where the amount of inflammation exceeds the ordinary boundaries and some means of alleviation are called for. In the case of young children, the desire to relieve the itching by scratching is almost uncontrollable, and there is danger of interfering with the integrity and completeness of the process if this be permitted. To avoid it the vaccination should be covered with a doccil of lint wet with olive oil, and held in place with a few turns of a bandage, the ends of which should be secured by a few stitches. If there is considerable local fever with swelling and tenderness, much relief will be given by the occasional application of dilute Gulard's lotion (sub. acetate of lead one part, to ten of water).

In cases of exceptional violence, tending to gangrene, erysipelas or septicæmia, active measures, both medicinal and local, should be used just as if the same condition had resulted from other causes, Hammamelis (witch hazel) is one of the most soothing applications* and will control the excessive inflammation better than any thing else which we have tried.

MEDICO-LEGAL.

BY DAVID A. STORER, COUNSELLOR AT LAW, NEW YORK.

I.

Will—Regularity of Execution—Testamentary Capacity—Undue Influence.

THE admission to probate of a will made by a childless widower, leaving all his estate, which was a moderate one, to a sister of his deceased wife, who had sustained the relation of a daughter to him and was a member of his family, was contested by one of eleven nephews and nieces, the decedents next of kin and heirs at law, on the grounds of undue influence, lack of testamentary capacity and informality of execution.

The evidence showed that the attestation clause was read by the scrivener in the presence of the decedent and the subscribing witnesses, and that decedent then signed it and declared it to be his last will, and it was then signed by the witnesses at his request, and while the contents of the will were not at the time of execution disclosed to the witnesses, it was apparent that the decedent was always a nervous and eccentric man, and in the latter years of his life addicted to the use of stimulants to such a degree as to, at times, become intoxicated.

Held, That the testator was of sound and disposing mind at the time of the execution of the will, and that the disposition he made of his property was, under all the circumstances, natural and proper, and that the will was properly admitted to probate.

II.

SUPREME COURT. GEN. TERM, FIFTH DEP.

Statutory Factory Fire Escape—Landing Place—Liability of Occupant to an Employe—Negligence—Opinion Testimony of a Surgeon—Effect of Factory Inspector's Fire Escape Certificate.

Supreme Court, General Term, 5th Department, in reviewing an action brought to recover damages sustained from use of defective fire escape, October Term, 1893.

Held. 1. A safe landing place is an essential part of the suitable and proper fire escape required by statute to be maintained on the outside of factories.

A manufacturing company, occupying as lessee a seven-story factory, maintained no stairs from the upper floor to the roof, as prescribed by the statute, but provided the building with two outside fire escapes, consisting of iron rungs inserted in the walls; one of these escapes was practically useless by reason of shutters opening against it; the other escape ended over an open area, some six feet wide, across which there had once been a platform, but the platform, except a remnant about two feet wide and two transverse iron bars on which it rested, had been removed; between these bars was a wooden chute, about three feet wide, the mouth of which was under the fire escape. The building took fire, and an employe of the occupant, in escaping by means of the accessible fire escape, dropped from its bottom rung and fell into the chute and was injured; he thereupon brought an action against the occupant of the building to recover damages, claiming that his injury was caused by the defendant's negligence in failing to provide suitable and proper fire escapes.

Held, That the evidence tended to show that the plaintiff's injury was caused by the negligence of the defendant, it appearing that the defendant had caused the covering of the area to be so removed that persons using the fire escape were liable to receive serious injury.

Held, also, That the plaintiff was not guilty of contributory negligence in attempting to use the fire escape.

A surgeon, who had examined the plaintiff immediately after his injury, was permitted to testify, as a witness for the plaintiff, that, judging from the relative position and the condition of the broken bones, in his opinion, the foot of the plaintiff's broken leg struck upon a sloping object, and that the heel of the foot struck the object first before the ball of the foot struck, and that his body was in an upright position when he fell.

Held, That the evidence was competent.

The defendant claimed that the approval of the fire escape by the factory inspector, operated as a compliance by the defendant with the requirements of the statute and constituted an answer to any charge of negligence. It did not appear

*We have used fluid "Sanitas," diluted to $\frac{1}{10}$ strength, with the best results.—EDS.

that the inspector ever saw, or had his attention called to, the condition of things under the fire escape where the plaintiff was injured.

Held, That this claim could not prevail, as it could not be successfully maintained that the inspector's certificate could operate to convert an obviously unsafe landing into a safe one.

III.

Will—Ambiguous Residuary Clause.

A residuary clause in a will provided as follows: "All the rest and residue of my estate both real and personal, not heretofore disposed of, I give, bequeath and devise as follows, all of my household goods, furniture and effects, after the decease of myself and wife to Kate M. Mulman, Myra E. Corbin and Ella Lockwood to be equally divided between them, share and share alike."

Held, (Supreme Court, General Term, Fifth Department.) That, in accordance with the intention of the testator, as disclosed by extrinsic evidence, and without giving the word "effects" a broad sense, this clause of the will disposed of the entire residue of the estate, and should not be limited to "household goods, furniture and effects."

Privileged Communication—Physician and Patient.

A married woman was a passenger on the Manhattan Elevated Railway. As she was going on the rear platform of the car, an iron gate was forcibly swung to by the brakeman, striking her a severe blow on the right side, which was immediately followed by bearing-down pains, and ultimately by a miscarriage. At the trial of an action for damages, the evidence clearly established the defendant's liability for the wrong, and the jury awarded the plaintiff a verdict for $5,000, which, in view of the Superior Court, at General Term, on appeal, was not excessive.

The exceptions taken during the trial by defendant, were strenuously urged as reasons why the judgment should be set aside. Chief among these, was the exception taken to ruling of the trial court excluding the evidence of two physicians who professionally attended the plaintiff some months prior to the accident, and knew of her physical condition before she met the injury complained of in the action. This evidence was offered by the defendant, and excluded under the objection of the plaintiff that the questions propounded called for the disclosure of information acquired by the witnesses while attending the patient in a professional capacity, and were consequently contrary to the provisions of Section 834 of the Code.

The defendant claimed that by bringing the action, and putting her physical condition on trial, she waived the privilege of the statute, and the testimony thereby became inadmissible. A number of authorities were cited in support of this view, which were inapplicable. Among them, Marx *v.* Railway, (heretofore discussed in these columns) where it was held by Judge Van Brunt, that if a party testified to a confidential interview with his physician, his adversary may call the physician to contradict the story of the patient. These authorities were held to have no application in the case at bar, for in those cases the plaintiff, by his own act, opened the door for the admission of the testimony offered, and in that manner effectually waived the privilege of the statute. In this case, the plaintiff had not, on her direct examination, testified to any fact which made the testimony of the two physicians relevant or material to the issue. They had attended the plaintiff prior to the accident, and had no knowledge of her physical condition at that time, or subsequently. Under cross-examination, however, the defendant entered upon a lengthy investigation as to the prior history of the plaintiff, the ailments with which she had been troubled, the names of the physicians she had consulted, and the troubles for which they prescribed; and upon this cross-examination the defendant based the entire theory of waiver.

Held, "That there was clearly no waiver. The privilege belonged to the patient; could be waived only by her consent, or by some act of hers, tantamount thereto. No act of the defendant could effect any such result against the plaintiff's will. The privilege is founded on public policy, and in all cases where it applies, the seal of the law must forever remain until it is removed by the act or consent of the patient.

"The ailments for which these doctors treated the plaintiff were not of an obvious nature, such as injuries to the leg or skull, but were of an occult character, which could be ascertained and treated only by reason of the highest confidence possible to bestow upon professional men; and it would have been a gross breach of privilege to have allowed them to break the seal of secrecy by testifying to any such matters."

In People *v.* Murphy, 101 N. Y., it was held that a physician who attended a female after an abortion had been produced, was incompetent, under the statute, to testify, as a medical expert, that the crime had been committed. Indeed, the courts have invariably held to the doctrine that the protection from disclosure of information acquired in the confidential capacity of physician must be enforced unless the patient, either expressly or by some affirmative act of his, waives the benefit of the rule. If the defendant's purpose in calling the two physicians as witnesses was not to contradict the facts brought out by it on cross examination of the plaintiff, then the materiality of the proposed evidence was not obvious, and the defendant ought to have indicated to the court, in some form, why their testimony should be admitted.

Damages—New Trial Because Nominal—Costs on Recovery of Nominal Damages.

An action was brought by the administrator of a child under three years of age, who died, as alleged, from the effects of injuries caused by the

negligence of the servants of defendant. The jury found a verdict for the plaintiff, and assessed the damages at six cents. Plaintiff moved to set aside the verdict as inadequate.

Held (by Judge Gildersleeve, at Special Term, Superior Court), That the value of the decedent's life, when tested by the affections of his parents and the bitter disappointment his untimely death brought to them, is inestimable. From that standpoint the next of kin sustained a loss that has no equivalent in money. There was, however, no evidence from which the jury could estimate the pecuniary injury, except the proof that decedent was an infant of the age of two years and nine months, and in good health. It cannot be said that the proof established, with any degree of certainty, a substantial pecuniary injury. The chances of continued life, success and ultimate benefit to the next of kin, as deducible from the evidence, were too problematical to require the jury to fix some substantial sum as a pecuniary reward for the injuries. The jury acted within their province. I am reluctant to disturb their verdict, for it is not clear, from the evidence, that injustice has been done by the award of only nominal damages. Motion for new trial denied.

The defendants appealed from allowance of full costs.

Held, That in an action under this statute (N. Y. Code Civ. Pro. Sections 1902 and 1904), the plaintiff, on recovering nominal damages, is entitled to full costs.

Same.

In an action by a father to recover damages for injuries to an infant child caused by defendant's negligence:

Held (by the Court of Appeals, N. Y.), That he is entitled to recover his pecuniary loss, *i. e.*, the value of the services of the child while incapacitated because of the injury, and the reasonable expenses necessarily incurred in the effort to restore the child to health. The amount of the loss recoverable is not affected by the financial condition of the patient.

In the case under consideration, it appeared that the father, who had had experience as a nurse himself, in that capacity took entire charge of the child; after proving the value of his services as such, he was permitted to prove, under objection and exception, that in order to care for his child he gave up a lucrative business engagement and also to prove the amount of the agreed compensation; the trial court refused to charge that the jury was not at liberty to allow more than what would have been paid to a competent trained or professional nurse.

Held (by Court of Appeals), This was error. That while plaintiff was entitled to recover the value of his services as a nurse, he was not entitled to recover in addition thereto, what he might have made had he not abandoned the business engagement.

Life Insurance—Misrepresentions in Application.

By a policy of life insurance issued by defendant, the answers of the insured to the medical examiner were warranted to be true. In answer to the question, "When last attended by a physician and cause?" the answer was "Six years, measles."

In an action upon the policy, for the purpose of proving the death, plaintiff produced in evidence a verified certificate made about five months after the application, in which the attending physician stated that he had been the medical attendant or adviser of the decedent "for astralgia about one and a half years ago."

Held (by Court of Appeals, N. Y.), That the certificate could be availed of by defendant as evidence showing the falsity of the answer so made to the medical examiner; that the fact defendant would not have been permitted to introduce the statement in the certificate was not material; and therefore, that a refusal of the Court to charge, as requested by defendant, that this statement was to be taken into consideration by the jury, was error.

The judgment entered against defendant (insurance company), and affirmed at General Term, was reversed. 132 N. Y., 331.

Damages—Future as Well as Present Pain.

In Edward Kane, *v.* N. Y., N. H. & Hartford R. R. Co.—132 N. Y., 160—the Court of Appeals held that on the question of damages, plaintiff was entitled to recover present pain and what he would endure in the future.

Accident Insurance.

Defendant insurance company issued a certificate of insurance, by which it undertook to insure C. against personal bodily injury; in case death resulted from such injuries within ninety days, defendant agreed to pay plaintiff, the wife of C., $5,000. The certificate provided that no suit should be brought to recover "any sum under this insurance unless the same is commenced within one year from the time of the alleged accidental injury."

C. received an injury December 10, 1887, which resulted in his death January 2, 1888. An action was commenced December 29, 1888.

Held (Court of Appeals), "That so far as plaintiff was concerned, the action was to be commenced within one year after the injury to her, which was the death of the husband. And, the action having been commenced within a year therefrom, the action could be maintained."

ILLUMINATION OF THE EYES FROM BEHIND.—When an incandescent lamp is introduced into the mouth, for the purpose of ascertaining, by trans-illumination, the condition of the maxillartantra, the pupils are seen as blood-red apertures. Mr. M. Stevenson calls attention to the curious fact that when the light is thus introduced, as it were, by a back door, the pupils do not contract. This observation may prove to possess considerable importance.

CLINIQUE.

METHODS IN THE TREATMENT OF TYPHOID FEVER.

By H. T. Miller, M.D., Springfield, O.

WERE I to judge of the relative value of the different methods now used in the treatment of typhoid fever, as reported in the various medical journals, I would be most decidedly in favor of adopting the Brand method, with its magnificent showing of statistics, yet I cannot help but feel with the many who disapprove of it that it will never be generally adopted in private practice; for in this field, it must prove unsuccessful, and if successful to the few, it will be impracticable to the many. For it necessitates a corp of competent nurses, trained or untrained, and in other hands than physicians', I should think it a dangerous method.

It is not the purpose of the paper to arraign any method or arrogate too much to any particular treatment, for,

"Sweet are the uses of adversity
Which like the toad, ugly and venomous
Wears yet a precious jewel in his head,
And thus our life, exempt from public haunt
Find tongues in the trees, books in the running brooks,
Sermons in stones, and good in everything."

Taking a retrospect of the past five years, we find that the treatment of typhoid fever has undergone a number of radical changes, with the line of demarcation so distinctly drawn between each change, that those who have been progressive, and have adopted the latest fad, look upon recalcitrant adherents of the abandoned one as "sentimentalists" "and must yield to logic and common sense." Within that period of time, at least, three methods of treatment of typhoid fever were given birth, interspersed at different times, with a faint cry of "A new treatment of typhoid fever," each to be superseded by the other until the new method has relegated all to the shelf, the latter to be revived again when the new method has proved nothing more than a fad. Quinine, at one time the panacea in the treatment of enteric fever, has gone into desuetude. The anti-pyretic treatment is only pursued by a few, and then in a desultory way. The antiseptic treatment received its fatal blow not very long ago in an editorial in one of the most prominent journals in the East. Those who use aloes, podophyllum and colocynth are afraid to proclaim it for fear they would be looked upon by the luminaries in the profession as non-progressive.

I venture to say that the silent majority of physicians will go on curing ninety per cent. of their cases and allow the audible majority to continue to wrangle about statistics which in reality apply only to hospitals.

Before laying down a method of treatment followed most successfully by many physicians, I would ask the good nature of the reader to allow me to quote from a number of journals issued within the past four months. Like all physicians, I have always been interested in methods for the treatment of diseases, so the following "new treatment for typhoid fever," at once caught my eye, and with the permission of the reader, I will give it verbatim ad literatim, italics my own.

First, I give all my patients cathartic doses of podophyllin from my first visit up to the time when they are not only convalescent, but until they are well.

Secondly, I give them Fowler's solution in one-half drop doses hourly, and always.

Thirdly, they are given hot alkaline sponge baths, two or more times a day, the number of baths being regulated by the effect on their temperature and nervous system.

Colicky pains demand morphine for relief.

"*The diet is practically unrestricted with the exception that milk is absolutely forbidden. The patient is never asked to take nourishment in any form, nor ever refused when he asks for it.*

"You will notice a total absence of calomel, quinine, aconite, antipyretics, of whatsoever kind, antiseptics and cold baths, and this is all, with the exception, which rarely occurs, of a little tincture of catechu, and deoderized tincture of opium, to limit the number of fecal evacuations."—*Columbus Medical Journal, Sept. 1893.*

And again:

"The first requisite in the successful treatment of enteric fever is rest. The Brand treatment does not do this. The second point to be considered has reference to diet. This must be such as will necessitate the least possible activity of the organs of digestion and assimilation. Of all foods, by far the best in enteric fever is milk. The ordinary duration of the disease is so long, that systematic feeding should be continued from the beginning to the end. *Milk should be given at regular intevals in sufficient quantity, so that two quarts or more may be given in twenty-four hours.*

"*A patient who cannot or will not take milk is exceedingly difficult to manage.*" This same writer gives seven and a half to ten grains of calomel every other day until four doses have been taken. He further says, that at present bathing, according to the method of Brand, is enjoying an enviable popularity, as a method of reducing temperature, and preventing complications. This may answer well in hospitals, where it makes no difference whether any individual patient dies or gets well, and where there are conveniences for bathing and plenty of assistants. I venture, however, to predict with considerable confidence that this treatment will never be adopted in rural districts or in private practice.

"Aloes, podophyllum and colocynth have justly been banished from the pharmacopeia of enteric fever."—*Medical Record, Nov. 18, 1893.*

This evokes the following rejoinder from a brilliant advocate of the Brand method:

"When the author would persuade us, however, that 'favorable action' is obtained from calomel, in doses of seven and a half to ten grains every

forty-eight hours, until four doses have been taken, the cautious practitioner must ask for the rationale of this favorable action, and to wind up by calling the former 'a sentimentalist,' and must yield to logic and common sense."

I will leave the reader to draw his own conclusions, but truly, nature might stand up and say to all the world of all schools, *this* is a regular school.

After such effusive quoting from so many opposing methods I would be most decidedly disposed to remain among the silent majority, were I to give my own individual experience in the successful treatment of typhoid fever, but the method I would subjoin to those already disposed of has been successfully used by many physicians for many years, and I feel confident in saying that it will hold its own against methods yet to see the light of day. I venture to say with considerable confidence, that most physicians, however divergent their opinion, will concur in saying that bathing, according to the method used by Brand, will never become popular; and it is quite evident that the thinking portion of the profession have little confidence in some of the drugs used in the other method. So I have little modesty in flaunting before a certain portion of the readers of this journal the method here appended.

First.—Enjoin absolute quiet on your patient in a well ventilated room. He should only be disturbed for a change of bed clothing.

Secondly.—A systematic and judicious use of brandy. A quarter of an ounce every two hours, or according to the physical condition of the patient.

Thirdly.—Give milk in graduated quantity. Should milk fail you, you must then have recourse to the beef extracts,* and of these I have found Bovinine the best. A domestically prepared article is still better. But a restricted diet must be carried out.

Fourthly.—Sponging off with cool water or alcohol will often soothe and quiet the patient when other methods have failed.

Fifthly.—A careful and judicious selection of indicated drugs.

First and foremost of these is arsenic. It acts directly upon the blood composition, upon the tissues and upon the nervous system. The mucuous membranes are most powerfully affected, producing irritation, inflammation and ulceration. And this is noted especially in the digestive tract, where a violent destructive gastro-enteritis is established. The blood corpuscles are affected, sometimes destroyed. The leading indications for arsenic in typhoid fever are great restlessness, profound exhaustion; thirst for small quantities of water, often repeated, rapid emaciation, aggravation after midnight, a dry, fiery red and brown tongue, and diarrhœa. The stools are dark, thin, acid, putrid and slimy. It should be given at the very commencement of the fever and only omitted at a time when some other remedy is more strongly indicated. Of these rhus tox. comes next. It acts prominently upon the organs of animal life, upon the mucous membrane, the lymphatic glands and the muscular tissue. On the organs of animal life, rhus acts secondarily, producing a dullness of the senses, and a condition of the cerebral system closely resembling that present in the low types of fever.

It is indicated in a condition of mild delirium, stupefaction, restlessness, red, dry and cracked tongue, sordes, epistaxis, diarrhœa, yellowish, brown offensive stools.

These two drugs, with bryonia, are the principal ones indicated in typhoid fever. Bryonia acts especially and powerfully upon the serous membranes and the viscera they contain, more particularly the pleura and lungs; next the brain, and finally the liver. It acts upon the muscular fibres and last upon the mucous membranes of the respiratory and alimentary tracts. It is indicated when there is a confusion of mind, irritability, delirium, great thirst for large quantities of water, not often repeated. There is a dryness of the mucous membranes, especially those of the mouth and stomach. This is a result of deficient secretion. The patient complains of a heavy pressure in the stomach, as if a stone were lying there. The bowels are usually constipated, the fæces being dry and crumbling.

Nitric acid is very useful in typhoid fever with offensive, purulent and bloody stools, ulceration, great prostration, intermittent pulse; sometimes threatened paralysis of the lungs. Where there are cerebral symptoms belladonna should be thought of. Hyoscyamus and muriatic acids also when nervous symptoms become manifest.

Passiflora incarnata, sulfonal or bromide of potash are useful when rest is essential.

In impending heart failure, any of the following drugs may be found useful. Professor DaCosta's heart stimulant (Fraser's) glonoine, codeine or atropine, the latter to be given in very small doses. Oil of turpentine locally applied and given internally for tympanites is also useful in hemorrhage from the bowels. Nitro-muriatic acid too, has proven beneficial in this condition.

* We have found Rudisch's Sarco Peptone the best in such cases. [EDS.]

BENEFICIAL EFFECTS OF HEAT.

BY W. THORNTON PARKER, M.D., GROVELAND, MASS.

A RECENT editorial in the NEW YORK MEDICAL TIMES concerning the beneficial effects of heat has a practical value. "The application about the body of a person undergoing an operation is of the greatest importance." Almost any one who has attended many operations will readily agree to the statement here made. We see patients sacrificed before, during and after operation from neglect of this very precaution. Medical attendants warmly clothed and actively employed

seem to overlook the importance of giving patients protection against colds, more especially against drafts.

In private practice the presence of affectionate, solicitous friends or relatives is more frequent; but even here the value of warmth is lost sight of. More especially at this season of the year, during the presence of la grippe and pneumonia, the value of warmth in saving the lives of our patients cannot be overestimated. The hot milk, hot beef tea, all such food given hot often makes the difference between health and disease, between life and death. If we American physicians neglect the use of the ice-cap, we are equally to blame in the neglect of making use of the hot water bottle. It is a mistake to suppose that our ancestors were healthier because they slept in cold rooms. To sleep in a cold room with heavy bed clothes pressing down on the sleeper is not a rational proceeding. A moderately warm room with good ventilation and light warm blankets uncovered with the abomination of a bed quilt is a far more sensible procedure. A prominent physician of my acquaintance always removes the bed quilt from his patients' beds. No healthier bed covering can be found. The value of heat is repeatedly referred to in the Bible, and it is recorded that when a certain king was supposed to be dying, a young, healthy woman was placed in bed with him, to give him that warmth which his enfeebled body lacked.

By the use of our domestic animals these good effects of animal heat could be made use of in these times. A cat or a dog would be of value in this respect. I have lately had under my care a lady who had one or two large cats sleep on her bed during her illness from la grippe. Several physicians of my acquaintance have brought Newfoundland or other large puppies and placed them in the beds or cribs of their infant children for the sake of the animal heat they might impart. I have heard of using lambs for the purpose when children have been weak or sickly. For the same reason it is not right to allow healthy young people to sleep with old people. A young lady patient reported to me that an old woman wished to employ her simply to sleep with her. The old-fashioned "bed-warmer" was useful, and could be made useful in modern times to take away the deadly chill so often found in beds, more particularly in country houses. We find our American houses either heated to suffocation or as chilly as vaults. An even temperature day and night in the house and good warm clothing conduces to longevity. The morning bath in a comfortable room, and warm living rooms and hot food are valuable in the maintenance of health, We will find that these attentions to details will pay in the long run. In the treatment of shock, the value of warmth is generally well known. A tumbler of hot milk at midnight and at three o'clock in the morning has, I believe, in my own practice more than once caused the tide to turn in favor of the patient. Warmth is the symbol of life and cold is often the chill of death. The regulation of heat supply, with an abundance of pure air, is one of the most important problems in the sanitation of our homes, and of equally great importance in the management of our hospitals.

SOCIETY REPORTS.

THE LOUISVILLE MEDICO-CHIRURGICAL SOCIETY, STATED MEETING, JANUARY 5, 1894.

(Stenographically Reported by C. C. Mapes.)

DR. J. M. RAY, PRESIDENT, PRO TEM, IN THE CHAIR.

REMOVAL OF BROKEN CATHETER FROM THE URETHRA.

Dr. A. M. Vance: I was called upon some time ago to see a man seventy-five years of age, who occasionally had to use a catherer in emptying his bladder. This morning, before I saw him, he had passed the instrument into his bladder, and in attempting to withdraw it the catheter had broken, one end being found in the membranous portion of the urethra. I introduced a small pair of forceps, and luckily grasped the end of the catheter, and it was withdrawn without any difficulty. I simply mention the case as being a very fortunate one, as in most instances where a catheter is broken off in the urethra it passes on into the bladder, generally requiring an operation for its removal.

DISCUSSION.

Dr. W. O. Roberts: I do not think it wise to attempt the removal of a catheter from the bladder through the urethra. We cannot tell whether it has all been removed or not. I know this to be a fact, as I have had such a case. I removed several pieces of catheter, and putting them together, they seemed to fit perfectly, and the patient was positive that all the catheter had been removed. I afterward did a lithotomy upon this man, removing a piece of catheter fully two inches in length, which was the nucleus of a stone. I, therefore, think that when a catheter gets into the bladder, the thing to do is to operate at once.

Dr. A. M. Cartledge: I remember several years ago I was called to see a man who had broken a catheter in the bladder, and I succeeded in removing seven and one-half inches of the instrument. The patient went along four or five months, when I performed a perineal cystotomy and removed a large stone, the nucleus of which was three inches of catheter.

Dr. C. Skinner: Have any of the Fellows had a suprapubic wound open the second time, without any apparent cause, and without the knife, the primary operation having been a perfect success, and the patient having gotten well? Some two years ago I did a suprapubic cystotomy upon a physician of this city for chronic cystitis. The operation was a success in every particular, and there was entire relief of all distressing symptoms. Last Spring this patient began to have trouble again with his bladder, similar to previous attacks. Another physician was called, who curetted the bladder, and after a month's treatment an abscess formed in the cicatrix, and a few days thereafter the old wound opened. I was again called to see the case and my opinion asked as to the advisability of closing the wound. Upon inquiry, I found that pain had been very severe before spontaneous opening took place, and all symptoms had been greatly aggravated. As the patient was doing so well since the wound had re-opened, and the bladder was being thoroughly drained, I advised that it be left alone.

Dr. W. O. Roberts: In connection with the case just reported, I would like to state: A short time ago I was called to see a man who had been operated upon by the suprapubic method, three months before, for stone in the bladder, and after removing the stone the wound in the bladder had been stitched. The man recovered from the effects of the operation, without a single bad symptom. When he came to me, I found by sounding the bladder a

stone of considerable size, and he was anxious to have it crushed. The stone seemed to be of the soft variety, so I did a lithotrity upon him and removed over a teaspoonful of débris. In a piece of this débris was found one of the stitches that had been used in closing the bladder. I have never had a wound to reopen.

SAFETY PIN REMOVED FROM THE RECTUM, HAVING BEEN IN THE BODY SEVENTEEN YEARS.

Dr. J. W. Irwin: A lady recently came under my care, who had been suffering for seventeen years with some affection of the bowels. The trouble was not diarrhœa; it was not constipation; but now and then she had sharp, shooting pains in the colon, especially about the sigmoid flexure. It was necessary for her to take opiates for the relief of pain before she could get any rest. When she came under my observation the pain had shifted, being lower down in the rectum. I made an examination of the rectum, having introduced a speculum, and found a safety pin 2¼ inches in length, both ends closed, in the bowel, corroded by the action of the intestinal juices, etc. The only recollection she had of any circumstance that could possibly have led to the swallowing of a safety pin was seventeen years ago, when her last child was small, she had been in the habit of putting pins into her mouth, but did not know how or when she had swallowed one.

PROPOSED OPERATION FOR REMOVAL OF A GOLD CROSS, HAVING BEEN IN THE BODY NINETEEN YEARS.

Dr. C. Skinner: Last week a young man twenty-two years of age consulted me, complaining of pain in the region of the gall bladder. He is a very healthy looking man, dark complexioned, the son of one of our prominent druggists. The history is that, when three years of age, while playing with his little sister, they had between them a gold crucifix, probably about two inches in length, the cross piece being about an inch long, and upon which there was an image, all of solid gold. This little fellow, in order to keep his sister from having the crucifix, put it into his mouth and, as a matter of course, it was swallowed. The stools were watched for months, he was given various purgatives, which caused the bowels to move copiously, but the crucifix never passed. In the last three or four years he has been suffering with pain just about where you would expect to find the gall bladder, possibly a little behind it and to the right. He says the sensation is identical with what can be produced by making moderate pressure with the finger upon the surface. Sometimes pain is greater than at others, and the feeling is from within outward. There is no pain in the muscles or skin. He has no symptoms referable to the liver, no dysentery, and nothing that would indicate obstruction of the gall bladder. There has never been jaundice, nor gall stone colic; digestion perfect, and no constitutional manifestations of liver trouble. By careful and deep palpation the liver seems to be somewhat enlarged. The question naturally arises: If the cross has never gone through, has it become fastened in the location of the colon, fixed by adhesions, etc., and what procedure is indicated? I would like for some of the Fellows to give an opinion as to what should be done. Would exploratory incision be advisable under the circumstances?

Dr. W. O. Roberts: Dr. Vance assisted me some time ago in operating upon a girl who had swallowed a pin. Ten days afterward she began to suffer pain in the right iliac region, and by deep palpation a tumor was discovered. At first it seemed to be not quite as large as a hen's egg. The patient was taken to the Norton Infirmary. We watched her very carefully, had the stools examined, etc. She became very much constipated; the pin never made its appearance, but the tumor steadily increased in size, so that at the time of the operation it was quite as large as a duck's egg. We took it for granted that the tumor was in the cæcum, or possibly in the vermiform appendix and surrounding tissues. We cut down upon it, and found the end of the colon very much inflamed and thickened. We did not open it, however. The wound was closed, and there has been no further trouble. The girl after that had a number of very copious evacuations, and one day, I think, after being constipated for four days, she had a dozen very large watery evacuations; the pin did not pass, but the tumor diminished in size, and the patient was finally discharged from the Infirmary with the tumor very much smaller than a hen's egg. There has been no trouble since.

Dr. J. W. Irwin: In regard to appendicitis—foreign bodies having been found in the appendix, thought to be the cause of ulceration, etc. Experience in the dissecting-room goes to show that foreign bodies are frequently found in the appendix, also particles of hardened fecal matter, and yet no evidence of inflammation had been observed during life or after death. Furthermore, many of these cases are relieved by medical treatment, and if there is a foreign body in the appendix, it is reasonable to suppose it remains there; yet the patients get well. I believe that foreign bodies in the appendix have nothing to do with appendicitis. The vast majority of cases of appendicitis I believe to be due to a catarrhal cause, and not to the presence of foreign bodies. A few cases may be due to traumatism. I think experience of the future will show that foreign bodies have nothing to do with that disease.

The State Homœopathic Medical Society held its annual meeting in Albany, February 13th and 14th. Dr. Paine, of the Committee of Legislation recommended as a remedy for the irritation existing between the State Commission in Lunacy and the various local hospital boards that the law be amended to place control of hospital expenditures jointly in the hands of the commission and the superintendents of each State hospital, a majority vote of all to determine the amount of expenditures. The report also urged the establishment of a Homœopathic State hospital in Erie County for Western New York patients.

Before the final adjournment Dr. Paine said: "I desire, in making a few personal remarks, to call attention to the fact that I have been a member of this Society nearly forty-four years, having been present and participated in its organization in May, 1850.

"Of the twenty or more original charter members, Dr. I. M. Ward, Dr. E. D. Jones and myself are the only living representatives.

"I have been intimately connected, through official appointments to committee work, and as its Secretary ten years, with nearly all the details of its management during the greater part of this long series of years.

"I have labored in season and out of season for its advancement; the single purpose dominating all others being, to secure for this Society in fact and in name, an advanced position among the noted scientific associations of this country; and to secure also, through its influence, in behalf of the Homœopathic medical profession, a legal status *equal* in every respect to that of the other representative schools of medicine.

"It gives me satisfaction to feel that I have ever striven, directly and indirectly, with what degree of energy, wisdom and zeal that I could, through the instrumentality of this Society, by means of my official connection therewith, to promote the general interests of the Homœopathic school and system of practice.

"I find, however, this morning, that the end has come. I am not renominated for appointment on the State Board of Homœopathic Medical Examiners, and the committee on legislation has been made up with my name left off. I think this is well. I am glad younger men have been selected to conduct the work in which I have for so many years taken an active and personal interest.

"For the unflinching assistance, never failing co-operation and steadfast devotion of personal friends, I desire to express the fullest appreciation and the deepest gratitude.

"It is also a gratification to me that, while my methods have sometimes been ascribed to waywardness and misdirected zeal, *all* are willing to attest my self-sacrificing devotion to the attainment of measures for promoting the advancement of the interests of the whole Homœopathic profession."

The New York Medical Times.

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EXTERMINATION OR PALLIATION.

IN the light of modern science Dr. Sabrina Flick says: "Were half the energy which is being spent in the almost hopeless task of searching for a specific cure for tuberculosis devoted to its extermination the accomplishment would be assured." This statement is made on the ground of recent investigations made by Robert Koch, published in 1882, and confirmed by microscopists and pathologists in every part of the world, acting independent of each other, that a living germ called tubercle bacillus, readily isolated from all other micro-organisms, is the exciting cause of tuberculosis whenever that condition is found; and that this germ can be communicated in the sputa, either fresh, or dry and pulverized into powder, from one individual to another. Of course the germ requires a receptive soil to take root and flourish, and that soil is depressed vital activity, which prevents the active forces of nature from reacting against poisons admitted into the system through the air or the medium of food or drink. The fact has been so fully demonstrated that the germs may be admitted into the system through meat and milk that boards of health are more careful in their inspection in searching for these micro-organisms than for any other. When found, the cattle, however valuable, are immediately killed. It is an interesting fact the germ developed in the animal through the hypodermic injection of tuberculine is considered the surest test of the presence of these micro-organisms. As these germs do not multiply outside the human body, and as the dust removed from localities where the sputa from tuberculars may have lodged produces the disease when inoculated into susceptible animals, and always with the same symptoms, the conclusion is irresistible that the disease is communicated by germs which have been thrown off from some living animal organism. The tubercle bacilli, when taken into the body and finding a receptive soil in the lungs, bones or any of the tissues, produce small new growths or nodules, called tubercles. If these are in the lungs they soften, and the discharges filled with the living germs are thrown off in the expectoration. If they exist in the udder they pass off in the milk with equal poisonous results. In connection with the development of tuberculosis the purity of the atmosphere plays a very important part. Of a thousand deaths among farmers, as shown by mortality tables, only 103 died from tuberculosis, while among drapers and tailors the fatality arose to 300, and among printers and compositors to nearly fifty per cent. The mortality is of course highest in a vitiated atmosphere or where it is filled with dust, which, by irritating the lungs, renders them more liable to the reception of the germs.

The contagiousness of phthisis has been pretty thoroughly demonstrated in scientific journals and in the daily press, but in all the excitement growing out of this discussion and the call upon the health boards for special legislation, let it be borne in mind that it is only slightly contagious, differing materially from the contagion of typhus fever, small-pox, scarlatina and diphtheria. In fact, the disease is so little contagious that Dr. Williams, of the Brompton Hospital, in the last edition of his work on pulmonary consumption, claims that no more deaths occur from consumption in the hospital among the attendants than among the same number of persons in ordinary life. In the General Hospital of Vienna, whose wards are full of consumption, in the years before the disinfection of the sputa was commenced, there were two thousand seven hundred and thirty-six deaths from phthisis without a single case among the medical officers or nurses. In the Ward's Island Hospital, one large ward is filled with consumption in almost every stage of the disease, and yet no case among the physicians and nurses, who live in the building and are brought in daily contact with the sick, the dying and the dead. While we should take every wise precaution to stamp out this disease

and protect society from its ravages, by the careful observance of habits of living and rules for antisepsis, may not the best health officer be, not legislative officers, armed with the power of the law, setting their marks upon individuals and their homes, placing them to a certain extent in quarantine, but the family physician, who from education and familiarity by daily observation with every phase of the subject, is entirely competent to act as adviser without the aid of the board of health. Every educated physician admits that the disease can only be stamped out by preventing the marriage of tuberculous patients, and as that at the present time in all cases is impossible, the next step is to destroy the contagion as much as possible with the means at our disposal, and to build up the general health so as to change the soil upon which the bacillus flourishes, and by increased vitality prevent the germ taking root.

In conclusion, may not legislation in this particular disease at the present time be an unwise interference with the duty of the physician, who, in his daily study of bacteria and the toxines and ptomains produced by them, is best fitted to meet every condition as it arises? At least, the subject should be more carefully studied before any positive legislative action by the health board is taken.

ABSORPTION OF CATARACT.

"NOTES ON NEW REMEDIES" published in its December issue an exceedingly interesting paper by Dr. I. Hobart Egbert, on the "Absorption of Immature Cataract, with Restoration of Vision," illustrated by several clinical cases. The cause of non-traumatic cataract is without doubt a deficient amount of nourishment supplied to the lens. This nourishment, the author demonstrates, can best be supplied by a combination of mechanical and therapeutic means. The therapeutic agents found most productive of good results are (1st), *Eserine*, from its well-known power of equalizing nutrient processes among intra-occular structures and also the power of lessening intra-ocular tension, a condition quite constant in cataract, and specially unfavorable to lenticular nourishment, and (2nd), the fresh juice of *Cineraria Maritima*, on account of its marked solvent and discutient properties when applied to the removal of lenticular opacites. Dr. Egbert thus describes his manner of treatment:

The successful application of this method requires time, patience and dexterity. During the first two weeks the treatments are usually administered daily, and afterwards on every second or third day. The general plan followed at each treatment is, briefly, as follows: The patient being comfortably seated, the eyeball and lids are thoroughly cleaned with a tepid four per cent. (saturated) aqueous solution of boric acid, after which one or two drops of the eserine solution, (grs. iv t ℥a ıı dropped into the eye. A small particle of pure vaseline is then applied to the inner surface of the lower lid in such manner as to be easily diffused over the eyeball, and the eyeball manipulated through the closed lids (a process of gently stroking from within outward with the finger tips) for about fifteen minutes. The eye is then cleansed again with the boric acid solution, more vaseline applied, and manipulation repeated as before. The eye is then cleansed once more with the solution, and two drops of succus cinerariæ maritimæ are dropped directly upon the globe—the tissues of which are then in the best possible condition to favor its rapid absorption and certain action. No hard and fast rules can be given to apply in every case, but the general plan is always quite the same. The galvanic current is somtimes applied with apparent benefit in some cases where there is evidence of degeneration or faulty action of local nerves governing tissue nutrition. The lens, of course, has no blood vessels and nerves passing directly to it, but receives nutriment by inhibition from the uveal tract, and also, to some extent, from the vitreous and aqueous; hence, in order to furnish the lens with more nourishment it is necessary to supply those parts upon which it depends for sustenance with an extra amount of nutrient material, and also to increase, if possible, its capacity to receive and use the material thus placed within its reach. Strychnia, by internal administration, is also employed, although its action is general rather than local. Should the treatment develop considerable conjunctivital irritation, this may usually be controlled by frequent bathings with the boric acid solution during the intervals of treatment. On the other hand, any existing inflammatory disorder of the eye, or appendages—such as keratitis, conjunctivitis, blepharitis, dacryocystitis, etc.—should be eliminated before applying the cataract treatment.

One word concerning the selection of cases. Incipient and immature cataracts resulting from senile involution, or caused by debilitating disease, afford the best results. With such, restoration of reading power is not infrequently the per-

manent and happy effect of the treatment. Traumatic, many congenital, and mature cataracts are best treated by surgical operation.

OPIUM AND ITS ANTIDOTE.

IN February TIMES we gave the results of an experiment of Dr. Moore, in which he swallowed three grains of morphine, and immediately after ten grains of permanganate of potash with no unpleasant result. It was claimed by chemists that it is necessary to take the antidote immediately after swallowing the poison; for if the morphine once entered the circulation, the potash would have no effect. Dr. Moore shows the incorrectness of the assertion by a series of experiments on rabbits, of which the following is a fair illustration. The rabbit received a dose of five grains of morphine through the mouth. This was administered at twelve minutes to six o'clock. He was sinking rapidly by seven o'clock, when he was treated with a solution of six grains of permanganate of potassium, injected through the veins. Within half an hour he began to show signs of improvement, and by eight o'clock was almost entirely recovered.

"What we seek to show by these experiments," said Dr. Weil, "is that the permanganate of potassium will attack the morphia in the blood just as readily as when the poison is taken into the stomach. We also claim that morphia, if given hypodermically, sends a good part of the alkaloid poison to the stomach. In other words, the tendency of morphia is to get into the stomach. Dr. Hetzig, of Germany, discovered that when morphia is injected hypodermically into the body that about fifty per cent. of the poison thus administered finds its way into the stomach. It is therefore absurd to insist that Dr. Moore's experiment upon himself was valueless because of the rapidity with which the antidote followed upon the poison. If the affinity which the poison bears for the stomach is as strong as Dr. Hetzig claims, then Dr. Moore might with perfect safety have waited an hour before administering the antidote.

"But we claim that the success of to-day's experiments demonstrates that the permanganate of potassium is equally effective against the activity of morphine poison absorbed by the blood vessels. Its use must prove of incalculable service in the treatment of the morphine syringe victim. We are perfectly sure of the results attained, and it only remains to apply them in ordinary practice."

To illustrate the astonishing selective faculty of permanganate of potash for morphine, Dr. Moore mixed 250 grains of the white of eggs with an ounce of water, dissolving in this mixture one grain of morphine, and adding to the whole one grain of permanganate dissolved in one ounce of water. After thoroughly mixing, not a trace of the morphine could be found. The molecules of the antidote had selected the molecules of the morphine from the mass of albumen, and so converted it into something entirely harmless. In case of poisoning by any of the salts of morphine, Dr. Moore administers ten or fifteen grains of the antidote in eight ounces of water, repeated every half hour, three or four times. In case of poisoning by laudanum or opium he acidulates the solution with a little sulphuric acid or white wine vinegar. Experiments tried upon other alkaloids showed the permanganate to be without antidotal power. Reports are reaching us through the public press of several cases where attempts at suicide have been frustrated by the administration of this antidote.

REPORT OF THE STATE BOARD OF HEALTH.

THE State Board of Health has transmitted its annual report to the Governor. The work of the inspectors, who made a careful inspection throughout the State with a view to the prevention of cholera, which was threatened last spring, resulted in much good. The Board says it would be of great advantage if sufficient money be allowed to employ one or two sanitary inspectors, as a much better service could then be secured from the local boards. The year 1893 was not characterized by the occurrence of any serious epidemic except that of influenza, and the general mortality was somewhat below the average. A decided improvement in the quality of the drugs sold in this State has been effected by the work of the Board. The need of a State laboratory is again emphasized, so that all matters of a chemical nature which legitimately come before the Board may be given immediate and thorough investigation.

The work of examination of cattle for tuberculosis has increased beyond all expectations. Last year 20,310 cattle were examined and 678 were killed, about three per cent. The average cost of examination was forty-seven cents for each animal. The value of "Koch's lymph" as a diagnostic agent is assured by the experience gained. Facts are being collected bearing upon the use of tubercu-

lin, which will be valuable additions to the records of the efforts to eradicate consumption in cattle. In the early service tuberculin was little resorted to. Now almost every animal is injected.

Bacteriological examinations of milk and butter have been made. In the former the tubercle bacillus has been found in one sample, but not in the other. In eight samples of butter taken at random from eighteen packages made from milk of cows some of which were known to have tuberculosis no bacilli were found. Statements have been made that more attention has been directed to Jersey cattle than to other breeds. This is not so. It will require a larger appropriation to cope with this important work in order to make it as effective as the law intends. Owners of herds have made many personal applications that their herds be examined. At present there are more than fifty applications on file which have not been reached, some of them from cities, asking that examination of the milk supply be taken up.

CHLOROFORM.

THE discovery of chloroform has always been claimed on this side of the water; to have been first made in 1831 by Dr. Samuel Guthrie, an old army surgeon of the war of 1812, in his laboratory near Sackett's Harbor on Lake Ontario. Simpson of Edinburgh was the first to bring it prominently before the public as an anæsthetic, and for many years the best chloroform in the market was the Scotch chloroform of Duncan and Flockart. Mr. Guthrie, a grandson of Dr. Guthrie, says in a recent interview:

"My grandfather had been a surgeon in the army during the war of 1812. When the war was over he settled at Jewettsville, which was within a mile of Sackett's Harbor on Lake Ontario. Here he built his laboratory and for many years conducted experiments, mainly in explosives, with the result that he was several times blown up and more or less injured. Early in 1831 he manufactured chloroform by distilling chloride of lime with alcohol. He called the product chloric ether or 'sweet whisky.' I remember distinctly that we children playing in the laboratory would dip our fingers into the 'sweet whisky' and taste it. He did not know what use to make of this sweet whisky, so he sent it to *Silliman's Medical Journal* with a full account of how he made it. These accounts were published several months before any announcement was made in either Germany or France. There has been but little change in the process of manufacture since the first discovery, but the value of the discovery did not become known until 1847."

SCARLET FEVER.

SCARLET fever is seldom seen after the age of fifteen. When it prevails as an epidemic the immunity of some children from it, though exposed in a marked degree, has been a matter of comment, but the cause of the immunity has been a matter of theory. One of the most malignant cases of scarlet fever in our practice was that of a little girl who went to bed apparently well, but in the morning was found so much under the influence of the disease that she died in twenty-four hours. A cousin of the same age, who had slept in her arms all night, entirely escaped an attack of the fever.

The most recent theory of the cause of this immunity is that of Dr. Dawson, that the primary local lesion is in the tonsils, and the toxines produced by the microbial growth from this local lesion and absorbed into the system, produce all the symptoms attending the terrible progress of the disease; the incidence of the disease and the subsequent immunity being related to the structure and life history of the tonsils. Dr. Borgi of Paris advanced a similar theory to Dr. Dawson, who states that scarlatina is primarily a local affection with secondary injections—the eruptions—due to the formation and absorption of toxines.

AN OLD LANDMARK GONE.

THE Cleveland Homœopathic Hospital College, one of the oldest of its class in this country, is no more, and in its place has been erected *The Cleveland University of Medicine!* We cordially congratulate the faculty of this college for their courage in taking this step in the line of progress, which we hear was done with unanimity. We hope this may lead to consolidation of two Cleveland colleges, which we are sure will tend to higher medical education. Thus we realize that the sectarian designation is surely passing away, and before long students of all unsectarian colleges will be allowed to become candidates for the Army and Navy.

SOCIOLOGY.

IT is a matter of gratification that our great educational institutions are incorporating into their curriculum of study a minute investigation of the phenomena of mind and an elimination, through a careful gathering and analysis of facts,

of those social evils, the fruitful offspring of poverty, crime and disease. Yale and Harvard have recently followed the example of Clark University, in establishing psychological laboratories on a scale as complete as the present condition of the science will warrant, where excellent work is being done. The trustees of Columbia College in this city have not only organized a small psychological laboratory, but have recently established a Professorship of Sociology, which will offer a new and broad field for the students, both for study and practice. The courses in sociology will have a distinctively practical bearing, and the lectures will be supplemented by investigations of existing conditions. It is the purpose of the trustees to co-operate with the various charity and reform organizations, to engage in a careful study of the methods and work of these institutions, and to prosecute such inquiries as will enable the university to be of great service in the cause of charity and reform. The details of the plan which has been adopted by the trustees make it plain that a great deal of fruitful work will be accomplished by this department. The intention is to make its studies and inquiries so thorough and far-reaching that they will lead to results of great value, not only to the students of Columbia, but also to the people of New York and the people of the country generally. This is practical work, and cannot fail, presented along the line marked out, of not only casting a flood of light upon the causes of poverty, disease and crime, but to a certain extent pointing out a remedy. The solution of these great questions can only be reached through the facts reached and the principles established through this comparatively new department of study.

THE results of vaccination the present season have been such as to demand attention to the conditions which are responsible for these effects. Upon every hand physicians report an unusual number of severe cases of vaccine disease, and there must be a cause or causes. The symptoms produced in some cases have been grave and alarming, showing that a severe septicæmia had been produced, with the inflammatory œdema, lymphangitis, cellulitis and sometimes necrosis.

Naturally, our first attention should be directed to the quality of the virus, and to this end there should be some competent official supervision over these "vaccine farms," from which we obtain the virus, and this might be accomplished through local "Boards of Health," or through some officer specially designated, in either of which the profession would feel confidence.

We would suggest that vaccine producers would establish confidence in their products, by arranging some plan of supervision themselves, rather than to wait for its compulsion.

Physicians who practice vaccination ought to know the *modus operandi* well enough, but some are liable to be careless and slovenly with the means employed.

There can be no excuse in these days for using unclean instruments. The practice of washing the surface before operating is increasing, and should become the rule. After the vaccine has become dry, some use isinglass plaster dipped in boiling water for the first day, then some aseptic gauze, changed each day. While it may not be necessary to do this in every case, it is certainly excellent practice.

THE mention of a few plain facts in the January issue of the TIMES was quite sufficient to open the flood gates of abuse in the *North American Journal of Homœopathy*, and pour out a torrent of misrepresentation, slander and falsehood, without the slightest reference to the facts which excited its ire. It is to be regretted that a journal established by a band of high-toned *gentlemen*, Marcy, Peters, Preston and Holcomb, in the interests of truth and progress, should have so far degenerated as to present in its columns the disgusting exhibition of malice, misrepresentation and falsehood, shown in its last issue. We have no time or inclination to bandy words with a faction whose reckless disregard of truth and decency, whose malignant distortion of fact and malicious falsehoods often repeated by some of its followers, have done far more harm to the school it professes to serve than it can ever do good. In matters of policy the TIMES has always, and will always be, so long as its columns are controlled by its present editors, frank and outspoken in its sentiments; concealing nothing, misrepresenting nothing, but so far as it is in its power doing equal justice to all. To those of the profession who wish to know our sentiments, they will find them recorded in this journal, and any exception to our views, truthfully and courteously expressed, will always be met with equal courtesy and candor, but we have no time to follow the tortuous course of misrepresentation, malice and revenge.

WE understand that protests have been sent to members of the Senate against the passage of two bills which have been introduced in the Assembly for reducing the fee, which every candidate for the medical licensing examination has to pay, from $25 to $5. The medical law went into effect on September 1, 1891, and from that time till August 1, 1893, the receipts for examinations were only $10,005, while the expenses were $7,833.40, leaving only $2,169.60 to be divided *pro rata* among the twenty-one State Medical Examiners for twenty-three months' service. If the fee should be reduced as proposed, the receipts would be only $2,000, which would fall far short of the expenses, and render the law inoperative.

The medical profession we believe is unanimously in favor of the present law, and its repeal would benefit only imposters. The examinations are to determine the ability of graduates to practice medicine, and the seal of the State on their parchments make the State their sponsor, and is a safeguard for the citizens, as well as a benefit to the practitioners. The cutting off the means for conducting the examinations would be a public calamity. In behalf of the medical practitioners of the State we earnestly and respectfully join in the request and urge that no such change be made.

THE Academy of Medicine has established a bureau for nurses at 17 W. Forty-third Street, which should prove a great convenience to the profession and to the public. The co-operation of the profession is invited in carrying out the arduous undertaking of the committee having the matter in charge. For particulars address the committee as above.

THE New York Academy of Medicine has recently made its annual report through its Treasurer, Dr. O. B. Douglass, and we are pleased to note that the indebtedness outstanding is now only $10,000, there having been paid during the last year $20,000 on account.

To liquidate this debt there is on hand $3,295.56.

The aggregate of the various funds is at present $40,384.34, the interest alone of which can be used for designated purposes, for the advancement of medical science.

The value of the library is rapidly increasing, and there are now but two or three in the world more voluminous, so that larger quarters must be had at once to accommodate the natural increase.

The annual dues—twenty dollars from each Resident Fellow—are used to defray ordinary expenses, and to procure some five hundred leading periodicals which are kept on file, and to extend the usefulness of the library.

We fail to find any valuation of property owned by the Academy, but we judge that the real estate is free and clear, excepting $6,704.44 indebtedness before indicated. On the building and contents there is $100,000 insurance.

The present year ought to see the Academy free from debt.

The Academy should be congratulated upon its showing, and its members should take fresh courage in promoting its welfare.

We hope to see the Academy the medical home of every respectable practitioner in New York before very long.

SULPHATE of magnesium is now prepared in tablets for hypodermic injection in cases of constipation. In the Maryland Hospital for the Insane, out of one hundred injections made, sixty-seven were successful and thirty-three unsuccessful. The time between giving the injection and the evacuation averaged seven hours. There is no disturbance of the stomach and no unpleasant local effects.

THE Sanitas Co., to which the medical world are indebted for some of their most pleasant and powerful antiseptic agents, have recently prepared, for the purpose of fumigating rooms, pure sulphur fumigating candles, whose advantage over others is in the greater ease in lighting and the more perfect disinfection produced by the evolution of sulphurous acid gas in a pure form. One candle will disinfect 1,000 cubic feet.

DR. VAUGHAN HARLEY, at the meeting of the London Royal Society of Dec. 14th, gives the results of his experiments upon the action of sugar in producing muscular energy. In comparing the strength on a day when nothing but water was taken with that when a pound of sugar was added to the water, the sugar increased the muscular work done by from sixty-one to seventy-six per cent. When added to a full meal it increased the work from twenty-two to thirty-six per cent. The estimate was made from the results obtained from ergograph, which measured the work done by the middle finger of each hand in raising weights.

LOOKING FORWARD.—A gentleman of society on being asked to take tickets for a performance in aid of the Maternity of Hahneman Hospital, replied: "Certainly, for in my next incarnation I may be a woman and need a bed myself."

IN the last issue of the *Psycological Journal*, rythm is discussed at length, and the position of Waeleschex in his work on "Primitive Music" maintained that in muscular contraction and dilatation there is the rythm in which music has its origin.

DR. PATTON, the distinguished President of Princeton College "considers foot ball one of the greatest moralizing forces in the college, and that if he were a college man and had the proper physique he would try for a place in the college eleven." This was after the victory of Princeton over Yale.

THAT students are not repelled by the increased demands made upon them is evident from the fact that the entering class of the College of Physicians and Surgeons, notwithstanding the four years' course recently adopted, bids fair to be the largest in the history of the college.

IN a paper read before the British Gynæcological Society, Dr. Christopher Martin, Surgeon to the Birmingham and Midland Hospital for Women, argues in favor of the nerve theory of menstruation, claiming that menstruation is a process directly controlled by a special nerve center; that this center is situated in the lumbar part of the spinal cord; that the changes in the uterine mucosa during the period, are brought about by katabolic nerves, and during the interval by anabolic nerves; that the menstrual impulses reach the uterus through the pelvic splanchasics or the ovarian plexus—possibly both—and that removal of the uterine appendages arrests menstruation by severing the menstrual nerves.

THE annual report of the State Board of Charities furnishes a sad comment on the habits of life and manner of living of a portion of our population in its census of an increase of eighty-eight per cent. of insane in our insane hospitals, against an increase of only twenty-eight per cent. in our population from 1880 to 1892. The increased accommodations for the insane, and their better care, may account for a portion of the vast difference, but certainly not for all. There is no doubt that insanity and nervous diseases are vastly on the increase, and the great question is as to the cause. Possibly the universal interest and active work in psycology and sociology may not only solve this problem, but lead up to the remedy.

BIBLIOGRAPHICAL.

George Keil, 1715 Willington Street, Philadelphia, announces the early publication (third edition,) of the Medical and Dental Register-Directory and Intelligencer, for the States of Pennsylvania, New York, New Jersey, Maryland and Delaware. It will present not only a complete list of all medical and dental practitioners in the States named, with place and date of graduation, but also lists of professional educational institutions, hospitals, societies, etc., etc., and will be of much practical value to all members of these professions.

THE ART OF LIVING IN AUSTRALIA. (Together with three hundred Australian cookery recipes and accessory kitchen information by Mrs. H. Wicken, Lecturer on Cookery to the Technical College, Sydney). By Philip E. Muskett, late Surgeon to the Sydney Hospital, etc., etc., pp. 431. 12mo. London: Eyre & Spottiswoode.

An interesting and instructive little book, which should be of service to any reader, as much of its contents applies to people living anywhere.

Antiseptic Therapeutics, by E. Tronessart, M. D., Paris, translated by E. P. Hurd, M. D., in two volumes, is issued from the press of George S. Davis, as a contribution to the Physician's Leisure Library Series. This work, which is here produced entire for fifty cents, forms Vol. XXI. of the Charcot Debone Series, and is undoubtedly the best treatise on the subject which has yet appeared. The work discusses very clearly the evolution of the microbian theory; antiseptics borrowed from mineral or inorganic chemistry and from organic chemistry, with a general resumé and conclusion.

TREATMENT OF THE DISEASES OF THE STOMACH AND INTESTINES. By A. Mathieu, Physician to the Paris Hospitals. (Medical Practitioners' Library.) 8vo., 285 pages. Parchment muslin, price, $2.50; flexible leather, gilt top, price, $3.25.

The writer's reputation as an investigator, and his exceptional experience in connection with the administration of the Paris Hospital, have given this work a world wide circulation on the Continent, where it is considered the best, as it is the latest treatise on the subject. The treatment of the diseases discussed by the author has been considerably modified of late as a result of patient investigation, especially in the chemistry of digestion and the most recent and approved therapeutics.

THE MONISM OF MAN; OR: THE UNITY OF THE DIVINE AND HUMAN, by David A. Gorton, M. D., author of "The Principles of Mental Hygiene," "The Drift of Medical Philosophy," etc., formerly editor of the "National Quarterly Review." 8vo. pp. 330. New York and London: G. P. Putnam's Sons, 1893.

Our pages have borne appreciative testimony to the value of Dr. Gorton's latest volume, written by one of his pupils, while the work was in press. That notice appeared in the TIMES in July last. The scope of the book is well stated in the publishers' recent "Notes of New Books," and we cannot do better than to reproduce a part of it here.

"In this volume Dr. Gorton has sought to show the

unity—oneness—of that which it has been customary to regard as dual and separable. The distinction between matter and force, soul and body, physical and psychical he regards as conventional, or as existing only in idea, having no predicate in fact or reality.

"The subject is discussed with rare catholicity of spirit and breadth of view. In support of his argument the author draws largely upon his own researches as a scientist and physician, and quotes the views of the world's greatest thinkers, both among poets and philosophers, of ancient and modern times. The *noumenon*, or thing in itself, he avers, does not appear to our lower senses, but is an object of perception."

The volume comprehends a profound study of the advanced problems of physiology and psychology. Many of the author's conclusions are not justified by the present attitude of science, but they are all in the line of scientfic development. No one who is alive to this development can read the volume without profit, be he physician or teacher, theologian or scientist.

In the prologue we notice two or three lapses which surprise us somewhat, coming as they do from an author of such scholarship and versatility as Dr. Gorton. For examples, *special* brain centres are referred to as "ganglionic" centres, and the *nonmenon* is given in the plural and misspelled as "neumena." Otherwise, the work is a model of accuracy and scholarship.

L'HYDROTHÉRAPIE DANS LES MALADIES CHRONIQUES ET LES MALADIES NERVEUSES: By Drs. Benibarde and Materne, Physicians of the Hydrotherapeutic Establishment of Rue de Miromesnil (Paris.), 487 pp. G. Masson, publisher: Paris: 1894.

Hydrotherapy has been more or less employed at all times as a therapeutic measure, for it is indeed a powerful curative agent. The attention which the priest Kneipp, in the little Bavarian village of Worishofen, is attracting by his empéric employment of water, in the management of disease, has served to awaken the interest of physicians in hydriatrics, though it has long held an important place in European medicine. Every scientific work on this subject is therefore to be favorably accepted, for this branch has not long been placed upon a scientific basis. This work on hydrotherapy in chronic and nervous diseases, is very thorough and complete. The opening chapters are devoted to the principal agents, their action upon the human body, the various apparatuses and procedures employed, their therapeutic effects, indications and contra-indications, the various rules to be followed in their application, etc. The different diseases of nutrition, diatheses, poisoning by various substances, infectious diseases, telluric intoxications, diseases of the blood, anæmia, chlorosis, etc., are each separately considered, with their appropriate hydropathic treatment. Nervous affections then follow; organic diseases of the brain, spinal cord and nerves, convulsive nervous affections, painful and paralytic nervous morbid states, with suggestions on their hydriatic management. Cutaneous diseases and neuroses occupy a single chapter; chronic affections of the motor apparatus, of the digestive tube and its appendages are ably presented in separate sections; diseases of the heart and circulatory apparatus, chronic affections of the respiratory tract, chronic morbid states of the uterus and its adnexa, with the final section, on the genito-urinary apparatus of the male, complete this able and well written work. It can be heartily recommended to those interested in this branch of medicine.

F. H. P.

Dr. Kyett, of Philadelphia, calls attention to this valuable sign as to the danger-line in anæsthesia: When the addition of fresh ether to the cone fails to produce an up-and-down movement of the windpipe the ether should be withdrawn; when that movement occurs the condition is a safe one.

CORRESPONDENCE.

MEDICAL NOTES AND CRITICISMS.

EPILEPSY AND ITS REMEDIES.

For a grave profession, or a profession having to deal with grave subjects, presumably thoughtful and philosophical therefore, the medical presents some curious anomalies. Take, for instance, the interest which is shown in new, untried and unproved remedies. The zeal with which they are seized upon and made use of implies either a waning confidence in the virtue of old remedies, or that the medical mind is in a state of chronic expectancy of discovering a universal panacea for the woes of mankind. And this last is a fact. It seems to be taken as a matter of course that every disease has its remedy, in like manner as every poison its antidote, although the sages of the profession have declared from time immemorial that the only sovereign remedy for disease is physiological righteousness.

Nevertheless, every few years the public is electrified by the news that some savant, with more science than sense, has made a discovery in therapeutics. At last the sovereign elixir has been found, it is alleged, that is going to banish those arch enemies of mankind—consumption, carcinoma, rheumatism, epilepsy, senility, etc. The older members of the profession, with the history of medical fads before them, shake their heads with incredulity; while the younger element, fresh from the breast of their *Alma Mater*, make haste to avail themselves of the new specific and to prod their confiding patients with it.

It seems to be taken for granted that the profession has made great advancement these last few years, which is true. But that advancement has been along the lines of etiology, hygiene, pathology, surgery and psychology. In therapeutics, there has been no considerable advancement since nearly one hundred years. True, the materia medica has been revised and greatly enlarged. Its agencies are less crude and cumbersome than formerly, but they are more subtile and not less deadly. It may be questioned whether mankind is better or worse off with the modern additions and improvements to the pharmacopeia. Be that as it may, the craze for new remedies goes on without abatement. Of late, we have seen the rise and fall of Pasteur and hydrophobin, Koch and tuberculin, Brown-Sequard and testiculin; and, later still, of Dr. Gibier and cerebrin or brain juice.

This search after specifics for the physical woes of mankind is a strange phenomenon, no less so than the search of the alchemist for the secret of the transmutation of metals, or of the evolutionist for the link between man and the monkey, or of the psychologist for the link between soul and body. It seems not to occur to these hopeful plodders in the dark that that for which they seek may have no existence.

In a paper which the last named gentleman read before the Medical Society of the County of New York, at its December ('93) meeting, copies of which were freely distributed to the secular press previously, he gave with refreshing candor the clinical results on the unfortunate patients under his charge, of his experiments with this perfectly inert and harmless substance. We give space to a brief report of a case of epilepsy which the doctor treated with hypodermic injections of brain juice during a period of eighteen months:

"At present, eighteen months after the beginning of the treatment, his improvement has persisted, and he remains from two to two and a-half months without seizures, which have also become much milder. I must state also that they reappear when the patient discontinues his injections. Under the influence of the injections his attacks of grand mal have diminished to one-tenth of their former frequency and intensity, while the petit mal has disappeared entirely."

One cannot but wonder by what process of cerebration the doctor came to the conclusion that aseptic brain

juice of a sheep or of any other animal could be a specific for epilepsy or any other disease? Has it any toxicological properties? And why does he prosecute the treatment when the results are so nearly nil? Will not the personal factor account for all the benefit the patient derived from the treatment? To us it looks like toying with a grave subject. We venture to assert that aseptic water would have given results not less disappointing. Moreover, there is scarcely a remedy in the clinical history of epilepsy that has not given more gratifying results than those recorded by Dr. Gibier. One of the worst cases of that malady that ever came under my observation made a good and permanent recovery in the course of three months, on a low diet, without any medicine whatever. This was more than thirty years ago, but the victim of the disease still lives to attest the permanency of the recovery.

Let us note a few of the remedies that have cured and not cured epilepsy. All the hellebores were prescribed by Hippocrates, presumably with success, for that malady. The Tribune Drusus was cured by black hellebore, according to Pliny. Later, the sulphate of copper came into use, with such powerful advocates as Boerhaave, Van Swieten, Cullen and others of the last century. The late Dr. Guthrie, early in the present century, cured a most aggravated case of it with the oxide of zinc.

Nitrate of silver had a long run in the treatment of epilepsy, and has probably cured more cases of it than any other remedy. It is a matter of record that a celebrated French physician, M. Lombard, cured, or at least treated successfully, a large proportion of his epileptic cases with that drug. Dr. Powell, of Guy's Hospital, in the last century, cured a large percentage of his cases with silver nitrate. Many notable writers of the present and last centuries have reported successes with it. Stahl, the metaphysician, mentioned it; and later, Boerhaave. Later still, Sims, Powell, Cappe and others published proofs of its efficacy. And still later, Baillie, Roget, Valentin, Heim, Sementini, and many others of the present century prescribed it successfully. The doses were enormous and long continued. As many as sixteen grains of the drug a day were prescribed and kept up for months. In Austria, it was at one time (seventeenth century) a secret medicine, according to Stahl, and was disguised in wine. Its administration was followed with marvellous results. It was a popular remedy down to a generation ago. The editor of Copland's works—the late Dr. C. A. Lee—states that he knew of an aggravated case of epilepsy that was cured by the nitrate of silver in doses of three grains a day, *continued during eighteen months.* The patient was left with characteristic discoloration of the skin. This discoloration of the skin by the prolonged and excessive exhibition of nitrate of silver is always present. The discoloration is peculiar, resembling the color of zinc. In all such cases the cure is believed to be effected by substitution—the induced drug disease curing the original one.

The common mistletoe, or *viscum album*, had a great reputation in the Middle Ages, in England, as a remedy for epilepsy. Many held it in superstitious awe. Its virtues were so highly esteemed that it was dignified with the name *lignum santæ crucis.* Colbatsch wrote a treatise on its virtues, in which he claimed that it was "almost a specific" in the grand mal. The great names of the seventeenth and eighteenth centuries endorsed it, such as Stahl, Boerhaave, Audree, Van Swieten, De Haen, Haller and others of less note. But, alas, its day has departed! It cures the malady no longer.

Vesalius brought out guaiacum as a remedy for the grand mal; and later, its virtues were championed by no less a celebrity than Hoffman.

Peony has likewise had its day among the remedies celebrated in the cure of epilepsy. The whole plant was used. The root, according to Parkinson ("Theatre of Plants") was also hung about the neck of the epileptic as a charm against the fits. Several physicians of the last century report remarkable successes with it—as large a proportion of cases as three out of four having been cured by one writer, M. Fauvarge.

Another at one time much esteemed remedy for epilepsy is our own *ruta graveolins*, or garden rue. It was used by Boerhaave and others of the eighteenth century; so also was viola odorata and viola tricolor. Indeed, the use of these last remedies dates back to Dioscorides and Pliny, and were highly prized for their anti-spasmodic virtues. But no one has survived to do either of these last named remedies reverence to-day—in the treatment of epilepsy, at least.

Nux vomica and its alkaloid, strychnia, must not be overlooked among the curative agencies for the malady under consideration. It was given mainly in the sthenic form of the disease. Lobenstein-Lobel recommended the nux vomica in huge doses, sixteen drops of the tincture every three hours, increasing the dose to thirty and forty drops! In commenting on this drug in connection with epilepsy, Dr. Copland observes that he knew of an instance of its "having caused an attack of the disease in a person who had not had it before." That should surprise no one, when the dose is considered.

Petroleum has had likewise its day in epilepsy. The same may be said of the oil of turpentine and the mineral salts. So old a writer as Dioscorides recommended petroleum. Ariosto, of the fifteenth century, is said to have employed it successfully in this malady. But it long since dropped out of favor.

Such has been the fate, however, of all the noted so-called remedies for the grand mal. The modern "remedy," which has been trumpeted forth by Dr. Brown-Sequard and re-echoed so loudly by the old school generally—namely, bromide potassium—is losing caste and sharing the melancholy fate of its congeners. The bromide never cured or modified a case of epilepsy, it is believed, except by producing bromidism, that is to say, producing another disease—illustrating the maxim, *contraria contrariis curantir.*

There are but few prominent remedies in the materia medica of either school that have not at some time or other come in for their share of favor for epilepsy. Some of the best known remedies of the new school materia medica have been used for centuries, in massive doses, against the malady, and successfully so, if clinical reports are to be believed. Ignatia amara was prescribed by Stein and Valentin; agaricus muscarius, by Whistling, more than a century ago; the salts and oxides of arsenic, copper, iron, zinc and lead, by all the old writers, especially by Haller, Hoffmann, Good, Johnson, Dunglison, Copland and others; heraclium spondylium, by the celebrated Pliny; hyoscyamus and the coniums, by Stoerck, Lentin and others; the seeds of lycopodium clavatum, by Schroeder and Kuhn; bryonia alba, by Reusner; lilium convallium, by Senkenberg, Baldinger and Langham; sambucus nigra, by Dufour; the solanum dulcamava, by Boerhaave; verbena officinalis, by Sebitz and Rosenstein; prunus lacerocerasus, by Frank. In each of these noted medicines—and the list might be greatly extended—its advent was heralded with acclaim, and the profession made to believe that at last a sovereign remedy had been found for a malady which at one time allied its victims with the evil one. But alas, the delusion! Would that we could say that the new remedies for the maladies were more successful than the old! And now comes another aspirant for fame with brain juice!

Verily, there is much force in Adam Smith's observation that "the cause of quackery out of the profession is the *real* quackery in the profession."

We are loth to pour cold water on the ambitious hopes of these enthusiastic explorers in so arid a desert as that of the kingdom of drugs; but, nevertheless, we cannot forbear expressing the wish that they might be induced to turn their talents into more fruitful fields of discovery.

THE DOMAIN OF SIMILIA.

It seems as if the doctrines of Hahnemann and the tenets of Homœopathy would never cease to agitate the

medical mind. Ever and anon some new fledgling of the old school, stimulated either by hope of glory or money, opens his batteries upon them with the effect of their utter destruction, in the judgment of party partisans. The latest of these assaults would be entitled to more respect and consideration by the candid of every school of medical thought, had the party making it exhibited a more judicial, or a less partisan judgment. Instead of dealing with the Homœopathy of to-day, pruned of its false conceptions and unfounded claims, and as taught and practised by its best exponents, the writer dealt his chief and heaviest blows against doctrines and methods which have ceased to exist—doctrines and ideas which long since became obsolete in the dominant Homœopathic thought—doctrines which like some of those advanced by Hippocrates, Galen, and later of Van Helmont and Brown, have melted away and disappeared altogether before the progress of science. Among the doctrines of Hahnemann, which have thus dissolved and disappeared, may be mentioned those of drug-dynamics, developed by trituration and succession; drug therapeia, or the doctrine of drug cure; pathogenia, or the doctrine of the dynamic origin of disease; and infinitissimal dilution of drug substance, and the infinite extension of drug-force. The errors of conception on these subjects and the fallacies of practice based on them, have been corrected, not by partisan discussion so much, as by the advance of scientific knowledge. They have been removed from the pale of legitimate controversy and are no longer subjects of profitable examination,—unless it be for a money consideration, as was the case in the latest instance to which we have referred.

Far different are the yet later contributions to Homœopathic literature of Drs. Dake and Searle, on the vital subject of the "Domain of Similia." We do not refer to this discussion to make an issue with the views of our esteemed colleagues, but rather to endorse and commend them. For square dealing, frank and honest avowal and judicial temper, these essays are models for emulation. The conclusion to which both these practical-minded men came was inevitable. Let us state it with a single commentary: The domain of similia, or the Homœopathic sphere of drug application, according to Dr. Dake, embraces "all diseases similar to those produced in the body by drug and other agencies, which exist in organisms *having the integrity of tissue and reactive power necessary to recovery*, the efficient causes of these affections having ceased to exist."

This is a dreadful fall from the heights to which Hahnemann pinned his hopes for a "perfect system of medicine!" Viewed from the theoretical standpoint, one is led to wonder if Homœopathy ever saved a human life, or ever cured a case of disease that, without its aid, would not have recovered? In other words, would the application of the law of similia cure any case of disease in which the "integrity of tissue and reactive power necessary to recovery" were wanting? For ourselves, we do not think it would, and the authors of these essays are evidently of the same opinion. But what is true of such cases in respect of Homœopathy is equally true of all other systems of practice. And in making the statement, we do but emphasize a truth, which the physician should never lose sight of, namely, that it is the unconscious powers that cure, be the agents or methods what they may. It is enough for the superiority of Homœopathy, and enough for the glory of Hahnemann that it has turned the profession, for the most part, away from brutal blistering and bleeding, from pills and boluses and the horrid concoctions of the old apothecaries, which assaulted nature and complicated recovery, and led the way to the introduction of harmless doses and mild and beneficient aids to recovery. Having accomplished that, Hahnemann may rest, assured of the laurels which the gratitude of mankind will not fail to entwine about his memory.

THE PERSONAL EQUATION IN THERAPEIA.

Whatever may be true of the domain of similia in therapeia, that of the physician who possesses the power to make the sick *believe in him* is of a vastly broader extent. In all cases, non surgical, the physician who brings to his calling a robust physique, good health, a warm sympathetic nature and a fine presence, is a power at the bedside to which it is difficult to set limitations. There is evidence which goes to show that his powers embrace a healing or curative quality, supplementing the *vis medicatrix* and transcending the sphere of the *ars medica*, from a scientific point of view. But this claim aside, and putting aside also all theories as to *modus operandi*, all experienced physicians must have observed how much more successful with the same remedies and dosage some of their members are than others. We are confident that with these physicians, in cases coming within the domain of similia, as proscribed by Dr. Dake and reiterated by Dr. Searle, the medicine prescribed by them is of the least consequence, and that the results would be the same if water only were administered. This fact has been demonstrated in my own experience over and again. If any of our readers are skeptical of its truth and desire further confirmation of it, we must ask them to make the experiment and observe the result for themselves.

How strange it is that men who have risen to prominence in the profession, risen, too, by the weight of brains, should ignore or overlook the significance of this truth. Hahnemann was amenable to this charge; so, too, were his eminent contemporaries of the old school, with an occasional discredited exception; likewise his pupils and followers without an exception of note. Even those who give Nature, or the Unconscious, credit for curing disease, fail to take into the count the personal agency of the doctor. For the most part whatever good results (the bad results are not noted) follow the exhibition of a drug, they are at once set down to the credit of the drug. The dose may have been large or small, crude or infinitissimal, but all the same, if the patient recovers, the materia medica scores a point. It never occurs to these sanguine, myopic gentlemen, those ambitious materia medica builders, that it would be quite as logical to attribute the fatal results, which so often follow the exhibition of drugs, in large doses or small, to drug-agency.

It is this short sight, this want of knowledge of the personal equation at the bedside, that has largely vitiated the materia medica of new and old school alike. In turning the leaves of journalistic medicine, a monthly flood of things that are published and given away in the interest of new remedies, one is made painfully aware of this fact. Wonderful "cures," sandwiched between reading matter of more or less practical interest, may be found on every page, effected by some new concoction, and duly attested by some distinguished physician. Recoveries may have followed the administration of these concoctions, as a matter of fact, but who knows by what agency they were effected? Apart from the direct agency of the *vis-medicatrix*, they may have been produced by Expectation, or by the agency of faith, or the mental or magnetic influence of the prescriber, and not by any specific virtue of the drugs at all. Sir John Forbes sagely observed that some diseases are cured by medicine, some diseases are cured without medicine, and some diseases are cured in spite of medicine. Let us bear the observation in mind.

The great need of the profession is a close adherence to the scientific method in observing clinical and pathogenetic effects of drugs. It is the only basis of procedure in building a materia medica that shall be worthy of trust or that shall command the confidence of thinking men.

D. A. G.

OUR LONDON LETTER.

Editors MEDICAL TIMES:

I am, on sober second thought, at a loss to comprehend how I came so readily to promise you a regular monthly letter from this city—since during my ten months' stay here, I have rather held aloof from all professional matters and associations. I expect, however, that it is "de vay

vot you has mit you" which beguiled me; but having made the promise, I will do what I can to keep it.

In the few intervals of leisure permitted me by other cares, I have been studying the antiquities, curiosities and intricacies of this wonderful city, as well as the ways, manners and employments of its population. And, of course, as a medical man, I could not avoid incidentally noting, with interest, some of the (at least external) features of its medical practice. But, as in every department of industry, the visitor to London finds the one trade, profession or subject in which he is especially interested, so enlarged and so complicated in its connections with conditions and surroundings with which he has been previously unacquainted, that he is at first quite bewildered—so it is with our own profession—its customs, institutions and practice in London. It calls for something better than a "snap judgment" on the part of the foreigner who comes in contact with it. I have no desire to emulate those tourists (Englishmen mostly) who skip through our country in six weeks, or less, and then "size us up" in an *ex-cathedra* estimate, either in book or lectures. A previous residence in Scotland, as well as this of the present in England, convinces me of the wisdom of the old saying, that "to know a person well, you must both summer and winter with them;" in no other way can you get at the "true inwardness," of national (as well as of individual) life and action.

Now considering that London with its population of quite six millions, has a body of between five and six thousand regularly qualified medical practitioners; and a vast aggregation of nearly 200 (it was 187 in 1891) hospitals, general and special, (with an available supply of over 8,000 beds, to say nothing of the immense number of out-patients treated annually) claiming the benefit of the Hospital Sunday Fund; and, furthermore, in view of the fact, that all these institutions, rich and poor, are actually competing with the general practitioners of the city, in caring for the sick and suffering; and that co-operative dispensaries, benefit and co-operative societies of all sorts are doing the same; and that chemists (not qualified to practice) are "doctoring" over their counters—you will easily see that the conditions of medical practice in London (and in similar, though perhaps to a less extent in some of the larger cities and towns of the kingdom) are by no means healthy or satisfactory at present.

Then, too, the relations between the teaching and licensing schools of medicine (nineteen in number) in Great Britain, are apparently in much need of better adjustment. As at present constituted, in many of them, the needs of the students seem to be made secondary to the interests of the teachers; their examinations for license lack a uniform standard—as certainly should be maintained among institutions having the same legal right to grant licenses for practice—and their several licenses or diplomas seem not to possess (in the judgment of the profession) the same relative value.)

The fact is, that, with the wide-spread and growing abuse of medical charities, the inconsistencies and defects of medical teaching and licensing, and the sharp competition which has been forced on the city practitioner by the great increase both of doctors and of population—the medical profession of London, is just now, in a very "disgruntled" condition, as is evident from reference to any British medical journal, or even the secular papers of the day. At present it seems to be a "muddle" out of which no one sees the way, though the air is full of "suggestions," plans and well meant attempts. To some extent you in America, are feeling the effects (especially in city practice) of the same increasing evils; but certainly not to the extent to which they have accumulated here; and, considering the more elastic social conditions of American life and character, you may escape their worst features.

This condition of medical matters over here, must be accepted, I think, as one of the inevitable consequences of that general restlessness and upheaval which is now breaking up the social and political crust of English life and institutions, and which is manifest in every department of thought and action, everywhere. The British medical profession, as a part of British society, is only taking its share in the gradual, but certain transformation which British society is bound to undergo.

But, I have said enough, I think, to show you that, in whatever I may say to you in regard to medical matters in this "tight little isle," I must speak, as far as possible, from well studied sources of information, and with wary step, lest I should do injustice to British practitioners, than whom, I am convinced, a more thoroughly qualified, hard-working, self-respecting and earnest body of men, do not anywhere exist.

But of one thing I can assure my American *confreres*: They need not envy the English practitioner. I will not (in this letter, at least) enter upon the question of the relative social position held by the American and the British practitioner; but I can say, without contradiction, that the American doctor's *fees*, even among the poorer classes, are very much better than the Englishman's; and that his *personal relations*, as a man and a physician, with *all* classes of patients, are much pleasanter and more conducive to his self-respect, than those of the average London doctor. These facts are just as indubitably the result of our social system, as the contrary is the result of the English social system. The "blight of caste feeling," reaches way down under the whole of this business here. And, until it is, in time, removed by that change which is ever going on in society here, it will continue to sap the energy and paralyze the spirit of any profession—medical, clerical or other.

I think I am in a position to give you reliable information concerning the ways and doings of London medical practitioners, the management of public medical charities, etc., and to fortify the back-bone of the American practitioner by showing him, that he may, perhaps, have been misled by the *glamour* which things at a distance sometimes have; and that he is, at least, "not half" so badly off, in regard to professional etiquette, ethics, social status, etc., as Mr. Ernest Hart, of the *British Medical Journal*, would fain have him believe.

That able and doughty knight-errant of the profession, like many others who have left home to seek errors which need redress, may well find plenty of work to his hand at home, in helping to disentangle his medical brethren of the United Kingdom (and London especially) from the meshes of perplexity in which "ancient vested rights and privileges," complicated "legislation," and the fast accumulating "exigencies of the times," have bound them hand and foot.

In my next, I propose to give you my *impressions* concerning the ways, manners, peculiarities and style of a London practice, as compared with those of an American city practice. Meanwhile, believe me,

Yours truly, as ever,

H. R. STILES, M.D.
London, Eng., Feb. 10, 1894. (*Univ. of N. Y.*)

THE DUAL ACTION OF DRUGS.

The ancient Latin fable which relates how the dying farmer called together his sons, and, after breaking one or two single sticks, bound several together, to demonstrate the strength which is to be found in union, illustrates the possibilities of the medical profession for the successful accomplishment of its noble mission, if we could only encourage the growth of justice and harmony. "Where envy and strife is, there is confusion and every evil work." That a profession whose objects are so noble, whose calling so honorable, should become notorious for its jealousies and bickerings, is certainly a deplorable state of affairs. The battles which we witness daily between professional rivals brings back to mind the ancient story of the two worthy knights, comrades in the same cause, engaging in deadly quarrel concerning the colors of a shield, one, beholding his side, declaring it was black; the other, from his standpoint, equally certain that it was white. A useless conflict which nearly resulted in the destruction

of both combatants, settled, at last, by the discovery that each was right and each was wrong; the shield having two sides and two colors. In medicine, this everlasting battle has been fought, and yet no one comes along to convince the angry participants that there may be such a thing as the dual action of drugs, and that the practice of therapeutics is empiricism pure and simple. And yet, perhaps, this struggle must continue just as long as we may hope to progress. Paradoxical as it may seem, there can be no progress without more or less destruction. Professional jealousy is, by no means confined to medicine. Envy is one of the most notable characteristics of human nature.

It is well worth the physician's while, even in the midst of his professional cares and worries, to read from the pen of such a gifted author as Hartshorne, the History of the Profession of Medicine. Here he will see the art is indeed long, time flitting rapidly away, opportunities by no means as frequent as we would wish. What man is there who loves and respects his calling, who is not heartily tired and sick of the unimportant bickerings which add to the mighty burden of professional cares we stagger under daily and hourly? Is this necessary? Can we not mitigate the existing evil of discord, and remember that "We are brothers, we are men, and we conquer but to save?" The poem of Oliver Wendell Holmes, "The Two Armies," should be read often by medical men who love their profession. Medicine has its dictators and its tyrants, it has its fashions too; one day it is our plan of treatment, another day something else, but beyond all and above all, the same Christ-like errand of mercy to the suffering. It is only recently we have noticed the symptoms of hard hearted trade impulses entering into a profession naturally so gentle and so generous.

This very week the *New York Medical Record* discusses in cold blood the question of the advisibility of medical men charging members of the profession for advice. It is gratifying to see that *Gaillard's Medical Journal* has no sympathy with such an innovation, and states most decidedly that "Such a course of conduct is wholly damnable. There is no member of the medical profession, however humble his position in life may seem to be, who may not some time have it in his power to make adequate return for medical services rendered to himself or to his family, either to him who has rendered them or to some one dear to him."

We know very well, that whatever our stock of knowledge may amount to, much of it has been acquired by the unselfish and unpaid for contributions of our fathers and brothers in medicine. We cannot if we would, and we would not if we could, debase our noble profession to the position of a mere trade. We must have more of what is popularly known as the "Esprit de corps." There are men occupying high stations in life, who are ready to oppose the theory that sentiment is hysterical and unhealthy.

Sentiment is of divine origin; it is the moving power in every noble action; it inspires the warrior and the monk, the statesman and the peasant, and is the essence of all that is noble and desirable in life. Certainly we have a right to insist upon it that there is such a thing as sentiment in the medical profession of a very high order. Neither the greed of wealth, the cruelty of envy, the treachery of jealousy, or the conceit of charlatanism, can stifle such a noble impulse.

W. THORNTON PARKER, M.D.

Groveland, Mass., February, 1894.

THE DISPENSARY ABUSE.

A recent report in the *New York Medical Record* concerning "Hospital Appointments and Advertising" concludes with this very sensible sentence "We want no bogus charity in medicine!"

Unfortunately, the medical profession have not been favored with the opportunity to determine what is for their best interest and honor altogether. But it is equally true that much of this same bogus charity, which the editor of the *Record* complains of, has actually originated *in* the medical profession itself, although not a legitimate part of it.

Ever since the day when Judas protested against the waste of precious ointment, and suggested that it had better have been sold and given to the poor, there are men in every community who can see no good in philanthropic efforts, unless they shall bring honor or pecuniary benefit to themselves. Human selfishness is a very noticeable characteristic.

As in days gone by, man's love is lust. One does not like to speak ill of his own profession. There is no greater honor than to be a truly good physician. In spite of all the discouragements, in spite of foes within and without, all the trials we medical men know so well, there are compensations. Probably the greatest discouragement for the general practitioner, young or old, is the dispensary abuse. Medical men have worried over this for many years, and all the time the trouble increases, and no real genuine effort has been made by the medical profession to mitigate the unreasonable burden placed on our shoulders.

The very best editorial we have ever seen on this *questio vixata* appeared in the December number of the NEW YORK MEDICAL TIMES. Could the plan there proposed be carried out, the weary, tired, troubled body medical, would receive a tonic which it has been sadly in need of for many a year.

A profession whose very existence, paid or unpaid, is one continual charity of the noblest kind, is crippled and betrayed by these hypocrites who, in the name of charity, rob us of a reasonable sustenance.

This sentiment does not echo the complaint of some unfortunate ne'er-do-well medical practitioner. It is the indignant protest of those who see on every hand men who have complied with all the requirements of the profession, as to study or service, robbed by those who are "holding the purse," or whose vanity seeks a monument in the form of a high position in a modern dispensary.

We can readily see how much more honorable would be the position of the medical profession, if this element of weakness could be removed. If the dispensary system has aught about it which is genuine or truly philanthropic, the good can be largely increased by following the admirable suggestions made by the paper referred to in the MEDICAL TIMES. If, on the other hand, the dispensary system be a colossal fraud, the united energy of the medical profession should be turned against it and the cause of the disturbance removed. By the united profession, I mean reputable medical men, without sectarian distinction. The battle of the pathies has been one of the most potent elements for evil in the medical profession, so freely accused of bitter jealousies and bickerings since the time of Hipocrates. As one stands upon the mountain and gazes down into the valley, witnessing the sorrow and pain, the battle going on between rivals whose interests are common, and whose blood is identically the same, so anyone who wearies with the interminable strife among medical men, must long for the return of reason and of gentleness. The day has passed for men of learning to lift their heads in contempt above their fellow toilers. If the barriers could be burned away and mutual respect and confidence restored, who could predict the brilliant future in store for our profession? We need not wait for the millennium, we wait only the dawn of reason and true manliness. The loss of fair play ought to put a stop to professional arrogance in high places. We see it in our army medical department more than in any other in the world. We see it in the narrow minded "regulars" of the civil profession. The fruit of such things is death. Undoubtedly these evils will continue until a storm will gather which will change the miserable condition of things now obtaining, and improvement and progress will demand recognition. It is an inevitable law that pride must have a fall and tyranny must eventually be lain in the dust. Truth is mighty and will prevail. Another equally true statement is that "The

mills of God grind slowly, but they grind exceedingly fine." The remedy is to enact a professional "motif," having for its foundation justice, honor and manliness.

W. THORNTON PARKER, M.D.,
Member Mass. Med. Society, Am. Med. Ass'n, Etc.
Groveland, Mass., Jan. 27, 1894.

TRANSLATIONS, GLEANINGS, Etc.

Tobacco Smoke.—Its Action as a Microbicide.—What has the French Society of Hygiene to say against the abuse of tobacco? We see in the *Italia Terniale*, of Feb. 21st, 1893, that after many experiments Prof. Tassinari is going to publish an interesting work of which the following are the conclusions:

1. The smoke of the Cavour, Virginie and Toscan cigars and black and short cut tobacco possesses a very great bacterialogical power, especially against the bacillus of Asiatic cholera.

2. This action as a microbicide must be, according to all probability, due to the empyreumatic products of the nicotine.

3. In cholera and typhus epidemics the use of tobacco may be useful rather than injurious.

4. Tobacco smoke deserves careful consideration in regard to the hygiene of the mouth, as a preventative of diseases.

In 1832, when the cholera epidemic spread through the Mediterranian and menaced Paris, we smoked our first cigar, without any enjoyment and with the inconveniences of a novice in smoking, because we were told that cigar smoke prevented cholera. To-day they say it destroys bacteria. That is all the difference.—DR. DE F. *Journal d'Hygiene.*

Fevers of Fatigue, of Exhaustion, and of Non-Elimination.—The following lecture—one of a series on "The Chemical Factors in the Causation of Disease," by Prof. Victor C. Vaughan, of the University of Michigan—as the *D. S. Microcosm* remarks, "puts prostration on an intelligible basis," and ought to have a personal as well as a professional interest for many busy practitioners.

That certain febrile conditions are autogenous there can be no doubt. These, like other diseases originating within the system, may be due to either of the following causes: First, there may be an excessive formation of poisonous substances in the body. Thus, Bouchard has shown that the urine excreted during the hours of activity is much more poisonous than that excreted during the hours of rest. Both physical and mental labor are accompanied by the formation of these deleterious bodies, and if the hours of labor are prolonged, and those of rest shortened, there will be an accumulation of effete matters within the system. Second, the accumulation of the poisonous matters may be due to deficient elimination. Third, some organ whose duty it is to change harmful into harmless bodies may fail to properly perform its functions. Illustrations of diseased conditions arising from these several causes will be given.

(*a*) Fatigue.—First, we may mention fatigue fever, which is by no means uncommon, and from which the overworked physician not unfrequently suffers. One works, night and day, for some time; elimination seems to proceed normally; but after a few days there is an elevation of temperature of from one to three degrees, the appetite is impaired, and then, if the opportunity for rest is at hand, sound and restful sleep is impossible. The tired man retires to his bed expecting to fall asleep immediately, but he tosses from side to side all night, or his sleep is fitful and unrefreshing. The brain is excited and refuses to be at rest. The senses are alert and all efforts to sink them in repose are unavailing. Fatigue fever is frequently observed in armies upon forced marches, especially if the troops are young and unaccustomed to service. Mosso has studied this fever in the Italian army. He states that in fatigue the blood is subjected to a process of decomposition brought about by the infiltration into it from the tissues of poisonous substances, which when injected into the circulation of healthy animals induce malaise and all the signs of excessive exhaustion. It is possible that in this decomposition of the blood the fibrin-ferment, which, according to Schmidt, is held in combination in the colorless corpuscles, is liberated; and it has been shown by Edelberg that the injection of small quantities of free fibrin-ferment into the blood causes fever, while the injection of larger quantities is followed by the formation of thrombi, as has been demonstrated by the experiments of Edelberg, Bonne, Birk and Koehlar.

Fatigue fever is often accompanied, especially during the period of elevation, by chilly sensations, and consequently it is pronounced malarial and quinine is administered, but it does no good, often harm by increasing cerebral excitement. The proper treatment is prolonged rest, with proper attention to elimination.

(*b*) Exhaustion.—Then there is the fever of exhaustion, which differs from fatigue fever only in degree. It is brought on by prolonged exertion without sufficient rest, and often without sufficient food. The healthy balance between the formation and elimination of effete matter is disturbed, and it may be weeks before it is re-established. Indeed, it may never be regained, for some of these cases terminate fatally. The fever of exhaustion may take on the typus form, delirium may appear, muscular control of the bowels may be lost and death may result.

That the fever of exhaustion may be mistaken for typhoid by some of the ablest clinical teachers, is shown by Peter in the following quotation: "It was in 1852," says he, "when entering upon my clinical studies, and ardent in my attendance upon the clinic at Chomel, I was witness of the following instance: A young man was received under the celebrated Professor's charge, suffering from prostration, muscular pain and rachialgia. Chomel made the examination with all the care and attention used by him; then, as was also usual with him, in the presence of the patient, he gave the diagnosis in Latin, which was *aut febris peyerica aut variola incipiens*, either typhoid fever or incipient small pox. I felt rather dissatisfied at a diagnosis so little precise, by one so eminent in his art. The truth of the matter was, though Chomel was not aware of it, this young fellow, in a state of destitution, had walked from Compeigne to Paris, sleeping by the wayside at night and nourishing himself with such food as chance supplied. It was under such circumstances the patient had developed febrile symptoms. The day after his admission, and simply from rest in bed, he felt better, and the day following he was altogether well."

That all cases of the fever do not terminate so rapidly as that instanced above by the great French teacher, is shown by one which I happen to have under my care at the present moment. A lady, rather frail in body, but without any organic disease, spent the greater part of the time, night and day, for ten days in the sick-room of her child, who died with diphtheria. Since the death of the child, the mother has been confined to her bed with a fever which varies from 99° to 102.5°. She has no soreness of throat or other evidences of infection with diphtheria. She has no symptoms of typhoid fever, and with the exception of a slight constipation, which has been easily relieved, her bowels have remained in good condition. She took but little food during the sickness of the child, and has had no desire for food since. Her temperature is but slightly affected by two grain doses of antifebrin, and the highest point reached each day is very variable. The mind is clear and she has been altogether free from headache. Her temperature is lowered by a few hours' sleep. This condition has now continued for nineteen days. I have pronounced this a case of fever from exhaustion, and if this diagnosis is not correct, I must admit that I do not understand the nature of the case.

A case similar to the above I saw some time ago in a young man who had been leading quite an inactive life as

a student, and who did a very foolish thing in walking one day a distance of more than thirty miles. The next morning he had a fever, which varied from 99° to 103°, and which continued for more than one month. The physician in charge pronounced this a case of typhoid, but of the correctness of his diagnosis there was not the slightest evidence. In this instance quinine was first employed, but it increased the wakefulness and restfulness, and was followed by an elevation in the temperature.

I have known at least one case of this kind to terminate fatally, and a most thorough post-mortem examination failed to reveal any definite lesion.

(*c*) Non-elimination.—Then again, there is the fever of non-elimination, which all physicians of experience have observed. There is a feeling of languor, the head aches, the tongue is coated, the breath offensive and the bowels constipated. The physician fears typhoid fever, but finds that a good, brisk cathartic dissipates all unpleasant symptoms, and the temperature falls to the normal. This fever is also liable to appear among those who are confined to bed from other causes. Brunton says: "No one who has watched cases of acute disease, such as pneumonia, can have failed to see how a rise of temperature sometimes coincides with the occurrence of constipation, and is removed by opening the bowels. The surgeon and obstetrician have often had cause to rejoice when they have found a fever which they feared indicated septicemia disappearing after free purgation."

Bouchard has shown that normal feces contain a highly poisonous substance, which may be separated from them by dialysis, and which when administered to rabbits, produced violent convulsions. He estimates that the amount of poisonous alkaloids formed in the intestines of a healthy man each twenty-four hours would be quite sufficient to kill, if it were all absorbed. He proposes the term stercoremia for that condition which results from arrest of excretion from the intestines.

It is more than probable that the poisons of the intestines are due to the bacteria which are normally present: but this would not exclude the fever of non-elimination from the list of autogenous diseases. The bacterial cells which are normally present in the intestines cannot be regarded as invaders from without.

The Hygiene of Writing.—(An excerpt from *The Writer*, September, 1893.) Edward Everett Hale gives the following description of his mode of life, which at the same time is full of advice to authors in general: I believe in breakfast very thoroughly, and in having a good breakfast. Breakfast is a meal at which much time may be spent with great advantage. People are not apt to come to it too regularly, and you may profit by the intermission to read your newspaper and lecture on its contents. There's no harm in spending an hour at the table.

After breakfast do not go to work for an hour. Walk out in the garden, lie on your back on a sofa and read; in general, "loaf" for that hour, and bid the servant keep out everybody who rings the bell, and work steadily till your day's stint is done. If you have had half an hour before breakfast, you can make two hours and a half now.

This business of writing is the most exhausting known to men. You should, therefore, steadily feed the machine with fuel. I find it a good habit to have standing on the stove a cup of warm milk, just tinged in color with coffee. In the days of my buoyant youth I said, "of the color of the cheek of a brunette in Seville." I had then never seen a brunette in Seville; but I have since, and I can testify that the description was good. Beef tea answers as well; a bowl of chowder quite as well as either. Indeed, good clam chowder is probably the form of nourishment which most quickly and easily comes to the restoration or refreshment of the brain of man.

If this bowl of coffee, or chowder, or soup is counted as one meal, the working man who wishes to keep in order will have five meals a day, besides the morning cup of coffee, or of coffee colored with milk, which he has before breakfast. Breakfast is one; this extended lunch is another; dinner is the third, say at half-past two; tea is the fourth, at six or seven; and, what is too apt to be forgotten, a sufficient supper before bedtime is the fifth. This last may be as light as you please, but let it be sufficient,—a few oysters, a slice of hot toast, clam chowder again, or a bowl of soup. Never go to bed in any danger of being hungry. People are kept awake by hunger quite as much as by a bad conscience.

Remembering that sleep is the essential force with which the whole scheme starts, decline tea or coffee within the last six hours before going to bed. If the women-kind insist, you may have your milk and water at the tea-table, colored with tea, but the less the better.

Avoid all mathematics or intricate study of any sort in the last six hours. This is the stuff dreams are made of, and hot heads, and the nuisances of waking hours.

Keep your conscience clear. Remember that because the work of life is infinite you cannot do the whole of it in any limited period of time, and that, therefore, you may just as well leave off in one place as in another.

No work of any kind should be done in the hour after dinner. After any substantial meal, observe, you need all your vital force for the beginning of digestion. For my part, I always go to sleep after dinner and sleep for exactly an hour, if people will only stay away; and I am much more fond of the people who keep away from me at that time than I am of the people who visit me.

Spontaneous Cure of Cancer.—At a meeting on January 11th, of the Imperio-Royal Society of the physicians of Vienna, an interesting discussion took place on the spontaneous cure of cancer. Professor Billroth cited the case of a woman, æt. 50, who was affected seven years previously with a mammary carcinoma, the size of an apple. The tumor underwent a process of mummification and was eliminated. To-day there remains only a white cicatrix around the site of the disease. The eminent surgeon had seen a number of cases in which tumors, with the exception of sarcoma, ended in a similar manner.

Dr. Stoerk mentioned a case of epithelioma of the tonsil which disappeared spontaneously. A year after, however, a relapse took place which necessitated the resection of the maxilla. Professor Kaposi remarked that the cicatrization of the cutaneous epithelioma is not infrequently observed by dermatologists.

Ten years ago, the editor was consulted by an old lady living in the centre of France, for a cutaneous epithelioma of the cheek, close to the eyelid. The tumor was of slow growth, but had a tendency to increase both in surface and depth, and for a few weeks it bled freely. The application of very hot water several times daily was advised. With the exception of a very small scab, the tumor had almost entirely disappeared in a couple of months. The treatment was discontinued, and the ulceration returned, but shortly after its resumption she was permanently cured. To-day she is quite well.

The First Signs of Locomotor Ataxy.—According to Prof. Fournier, the first symptoms of ataxy may be classed as follows:

1. Sign of Westphal.
2. Sign of Romberg.
3. The "Stairs" sign.
4. Crossing of the legs.
5. Walking at the word of command.
6. Standing on one leg.

1. Westphal's symptom is well known; it consists in the abolition of the pre-rotulian reflex, and is present in two-thirds of the cases.

2. Romberg's sign can be thus appreciated: The eye is an indirect regulator of motion; it helps to correct deviations in walking and maintains the equilibrium. When a patient is suspected of incipient ataxy, it will often suffice to make him close his eyes when in the erect position to verify the diagnosis. In a few instants his body will

oscillate, and if the malady is somewhat advanced he will be in danger of falling.

3. The "Stairs" symptom. One of the first and most constant symptoms of incipient locomotor ataxy is the difficulty with which the patient will descend stairs. If questioned closely on the subject he will say that at the very outset of his malady he was always afraid of falling when coming down stairs.

4. The manner in which a patient crosses his legs is often significant. In the normal state a man when performing that act lifts one leg simply to the height necessary to pass it over the other, whereas in the affection under consideration he lifts it much higher than necessary, describing a large segment of a circle.

5. Walking at the word of command. The patient seated is told to get up and walk instantly. After rising he will hesitate, as if he wanted to find his equilibrium before setting off. If, while in motion, he is told to stop short, his body, obeying the impulsion, inclines forward as if about to salute, or, on the contrary, jerks himself backward in order to resist the impulsion forward.

6. The patient is asked to stand on one leg, at first with his eyes open, afterwards closed. Although man is not made for this position, yet he can balance himself pretty firmly for a little time. The ataxic will experience a great deal of difficulty, and will instinctively call to aid his other foot so as not to fall. If his eyes are closed he will not be able to stand one instant, and if not held would fall heavily to the ground. Such are the symptoms of incipient locomotor ataxy; they will not be all present frequently, but they should be all sought for in order to avoid an error which might have grave consequences.

Conservative Treatment of Gun Shot Wounds of the Abdomen.—Frederick B. Lippincott, M. D., of Philadelphia, (*University Med. Mag.*) in his inaugural prize thesis on this subject, draws the following conclusions:

1. In about ninety per cent. of penetrating wounds of the abdomen, the viscera are involved.

2. In the majority of cases of abdominal gunshot wounds the intestinal lesions are multiple.

3. When the viscera are wounded, feces and gas, or finding the ball in the evacuations, are the only pathognomonic symptoms.

4. Nature is capable of effecting complete repair in wounds of the viscera by prolapse of mucous membrane, exudation of plastic lymph, bringing a healthy surface over the rent in the gut, and finally cicatrization.

5. Statistics do not show a better mortality by the operative than they do by the conservative treatment.

6. Wounds of the stomach and small intestines are more grave than those of the large intestines.

7. Shock of itself is not a symptom of internal hemorrhage.

8. The most common cause of death in gunshot wounds of the abdomen is septic peritonitis, although deaths from shock and hemorrhage are not rare.

9. The use of hydrogen gas by rectum as a means of diagnosis is not infallible.

10. Statistics do not justify abdominal section, except in well selected cases, and particularly where there is pronounced hemorrhage.

11. So far laparotomy has increased the mortality of gunshot wounds of the abdomen.

12. It is necessary for localized peritonitis to occur in order to attach the wounded gut to some healthy peritoneal surface.

13. The indications for treatment are to promote reaction, control hemorrhage by pressure or abdominal section, stimulate hypodermically, nothing by mouth, feed by rectum until adhesions have perfectly formed.

Flaying Treatment of Ephelides, Acne, etc.—Dr. Van Hornn, of Amsterdam (*Progrès Méd.*, Jan. 28, 1893), reports excellent results from the so-called flaying treatment of the face, which may be employed not only in ephelides and acne, but also in cases of small-pox pitting. The treatment occupies about one week, and is as follows: The face is covered several times daily for three or four days with an oxide of zinc paste containing 50 % of resorcin. The skin becomes as hard as parchment and small cracks appear; a special dressing is then applied. This consists of a mixture of gelatin, glycerine, oxide of zinc and pure water, applied warm and then covered with a thin layer of cotton wool. In a few days, the old epidermis is detached, and may be removed with the dressing. Unna, who devised this treatment, states that if the resorcin be removed too early its success is doubtful, while a severe dermatitis may result if it be allowed to remain too long. Van Hornn has not seen any bad results during the two years he has been using this treatment.

The patients sometimes complain at first of heat and itching, and later of tension and rigidity, but these are unimportant except in very nervous women. During the first few days, the urine may become a little blackish, but no dangerous symptoms have arisen. In cases of scars and pitting, the treatment may have to be renewed several times.

In one instance, the writer removed all the epidermis from the face of a young girl with an extraordinary number of freckles, and he publishes an interesting photograph of this epidermic mask.

Gallanol in the Treatment of Psoriasis and Eczema.—Cazeneuve and Etienne Rollet (Société Nat. de Méd. Lyons, 1893), report that either in powder or in ointment gallanol has cured in a few days cases of eczema and psoriasis which had been of many years' standing. One patient was cured of eczema in the scrotal region which had been ineffectually treated for six years; another after ten years. The remedies previously used had produced only temporary improvement, while gallanol effected the cure in four days. In many other patients the results were identical.

Gallanol is not poisonous, consequently it is far superior to pyrogallic and cryosphanic acids, which have caused serious accidents and even death by cutaneous absorption. It is applied as a powder:

℞ Gallanol powder, grammes 10.
Talc powder, grammes 30.

Or as an ointment on the ulcerated parts:

℞ Gallanol, grammes 4–10.
Vaselin grammes 40.

Against chronic, rebellious eczema and psoriasis, after washing with black soap, applications of a mixture of traumaticine and of gallanol, or, with a brush, of a mixture of alcohol and gallanol covered with traumaticine, are recommended.

A Correspondent has asked us to publish Dr. T. S. Robertson's formula for the cure of inebriety, and here it is:

℞ Arsenious acid.....gr. $\frac{1}{60}$
Strychnia Nitrate.....gr. $\frac{1}{30}$

Aqua q. s. for a single hypodermic. M. S. May be given once or twice a day.

OBITUARY.

Dr. Theodore Bilroth, who departed this life Feb. 6th, at the age of 65, stood foremost in the ranks of his profession as a surgeon, writer and teacher. His operation of pylorectomy for cancer of the stomach, in 1881, gave him a world wide reputation, which was increased year by year by successful work. His contributions to medical literature, in numerous books and essays, have been marked by originality of thought and great clearness of statement. Dr. Bilroth received decorations from nearly all the governments of Europe. During the last months of his life he suffered from the effects of heart disease, which finally caused his death.

MISCELLANY.

—India proposes to have a medical congress.

—No woman doctor earned a living by practice before 1860.

—Cloths saturated in milk are recommended as the best remedial dressing for burns.

—The late Mrs. Johnson, of San Francisco, has bequeathed $6,500,000 to found a free hospital in that city.

—The club fingers and bird's-beak-like nails are not to be expected in a consumptive as the sequelæ of syphilis.

—Tuft's Medical College, open to students of both sexes, starts its first year with a class of over seventy pupils.

—You should suspect renal disease when you have, not otherwise easily accounted for, vertigo, hemorrhages, gastric symptoms.

—In a Glasgow court of justice, quite recently, one of the witnesses said he believed in witchcraft, because the apostles mentioned it.

—Dr. Boardman Reed says that ten to thirty drops of extract of cimicifuga after meals rarely fail to effect a cure of seminal emissions.

—The *London Lancet* publishes a case of severe paralysis agitans relieved by 4-grain tablets of borate of soda given three times a day.

—A fall of temperature after twelve o'clock, noon, in a surgical case, Prof. Keen considers a good sign, showing that defervescence has set in.

—"Well, how do you feel to-day?"
"I feel as if I had been dead a week."
"Hot—eh?"—*Clinical Report.*

—Drop into urine in a test tube a few drops of the tincture of guiac, heat it to about 100 degrees, and if it turns pale blue, pus is present in the urine.

—Houghton, of Dublin, says that two hours of severe mental labor abstract as much vital strength from the system as a whole day of physical labor.

—Urea is markedly increased by the use of coffee and tea, hence these should be interdicted in organic and functional derangements of the kidneys.

—Prof. Keen: the best remedy for removal of proud flesh in a healing wound is chromic acid, ten grains to the ounce, applied about two or three times.

—The intolerable itching of that very troublesome disease, erysipelas, has been happily controlled, and all the symptoms mitigated by inunctions with lard.

—In cases of septicemia, Prof. Keen says, the best results will be obtained if the alcoholic stimulants be pushed to such an extent as to make the patient mildly drunk.

—Prof. Hare says that only cases of major epilepsy will be benefitted by the use of amyl nitrite, and especially those of the form which have an aura before each epileptic attack.

—There is now living in Philadelphia in excellent health an unmarried lady, eighty-one years old, for whom the late Dr. John T. Atlee performed ovariotomy more than fifty years ago.

—Acute hydrocele in children, if tapped with a small trocar and cannula, can almost invariably be cured, if the sac is irritated, after the evacuation, with the blunt end of the cannula.

—The *Bangor News* reports the birth of a boy where the mother is fourteen and the grandmother thirty-nine years old.

—Patients with nervous and mental disorders often exhibit remarkable change of weight. A French epileptic recently gained thirty-six pounds in twenty-six days, and then rapidly passed away.

—It is a common practice, but, according to Spencer, bad, nevertheless, to use a solution of sodium chloride in catarrhal rhinitis. It should be discouraged, as it increases the flow from the membrane.

—Dr. Baccelli, Professor of Clinical Medicine at the University at Rome, and President of the Royal Academy of Medicine, has been made Minister of Public Instruction in the new Italian Cabinet.

—A curious case was reported by Dr. Loubin, of Besancon. One of his patients swallowed a large clinical thermometer, which was discharged intact per anum, the thermometer registering 38.07° C.

—Gelsemium will often do more good in irritable bladder than any other remedy. It is especially adapted to those women of hysterical type troubled with irritability at the neck of the bladder, calling for constant urination.

—Governor Flower has appointed as members of the State Board of Health, Dr. John Edwards, of Gloverville, to succeed Dr. Dawes, of Saugerties, and Dr. Murray M. Adams, of Watertown, in the place of Professor Perkins.

—A farmer of Huntingdonshire, England, inadvertently swallowed a wasp while drinking a glass of ale. His throat began to swell immediately, and tracheotomy had to be performed soon afterwards in order to avert suffocation. The patient was saved with difficulty.

—The following advertisement appeared recently in a Philadelphia paper: "Wanted—A physician to travel with medicine company, to lecture; experience not necessary; prefer one who can play organ. A steady, pleasant and lucrative position offered. Address," etc.

—Webster said: "The man who has not abandoned himself to sensuality feels, as years advance and old age comes on a greater love of mother earth, a greater willingness, and even desire, to return to her bosom and mingle again with the universal frame of things from which he sprang."

—The Harvard annex for women is now the Radcliff College, formerly a part of the University, with power to confer degrees. It was named for Ann Radcliff, who, two hundred years ago, made a donation of one hundred pounds to Harvard, the first recorded donation from a woman to a college.

—State Senator Mitchell has introduced a bill into the Oregon Senate, making hypnotism, electro-magnetism or mesmerism a crime, punishable by death. The bill was introduced at the request of a distinguished lawyer, who is convinced that magnetic or hypnotic influences are responsible for many crimes.

—That funny genius, Kraft, of the *American Homœopathist*, certainly had a "spasm of sense" when he penned the following: We have long since learned this little lesson, that a thoroughly well posted materia medica man in Homœopathy cannot afford to pin his knowledge entirely to the symptoms evoked by the most perfect proving; in other words, that that Homœopath is the best Homœopath who knows all there is to be known about a drug. Shoemaker and others of the rational school go very much more deeply into the study of a drug than the Homœopaths, and it is wise and prudent to read Homœopathic materia medica with an old school-book close at hand. A thorough understanding of the physiological and toxiological action of a drug is a great help in recalling the symptomatology of the Homœopathic school.